IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF MISSISSIPPI
SOUTHERN DIVISION

STEVEN W. HOLLAND   **PLAINTIFF**

VS.   **CASE NO. 1:15-CV-306-HSO-JCG**

KEESLER FEDERAL CREDIT UNION   **DEFENDANT**

DECLARATION OF RANDALL A. SNYDER

I, Randall A. Snyder, hereby declare as follows:

1.   My name is Randall A. Snyder. I am an adult over the age of 18 and a resident of the state of Nevada. I have personal knowledge of each of the matters stated herein, and if called to testify I could and would testify competently about them.

2.   I am an independent telecommunications technology consultant and reside at 8113 Bay Pines Avenue, Las Vegas, Nevada, 89128. I have been retained by Maney & Gordon, P.A. in the matter *Holland v. Keesler Federal Credit Union*, No. 1:15-CV-306-HSO-JCG (S.D. Miss.) to provide my opinions relating to technology described within the Telephone Consumer Protection Act, 47 U.S.C. § 227, *et seq.* ("TCPA"). In particular, I have been asked to provide my opinions relating to the automatic telephone dialing technology provided by Interactive Intelligence and employed by Defendant Keesler Federal Credit Union ("KFCU" or "Defendant").

3.   My opinions in this declaration are based on my education, knowledge, experience, expertise, training and my review of the following documents in this case: Complaint and Demand for Jury Trial; Answer and Affirmative Defenses of Defendant Keesler Federal Credit Union; Keesler Federal Credit Union's Responses and Objections to Requests for Production Propounded by Plaintiff; Keesler Federal Credit Union's Responses and Objections

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to Interrogatories Propounded by Plaintiff; Cisco Unified Communications Manager Administration Guide, Release 7.1 (Bates Nos. KFCU038 – KFCU1023); Interactive Intelligence Customer Interaction Center® (CIC) Interactive Desktop Client Printable Help manual (Bates Nos. KFCU1024 – KFCU1603); Interactive Intelligence Customer Interaction Center® (CIC) IC Business manager Printable help manual; Case Study: Heritage Federal Credit Union's Small Call Center Tackles Large Call Volume Challenges with Help from Adapt; the Telephone Consumer Protection Act, 47 U.S.C. § 227, *et seq.* ("TCPA") and regulations promulgated thereunder; the Federal Communications Commission's ("FCC") Report and Order in the Matter of Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991 dated October 16, 1992; the FCC's Report and Order in the Matter of Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991 dated July 3, 2003; the FCC's Declaratory Ruling in the Matter of Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991 Request of ACA International for Clarification and Declaratory Ruling dated January 4, 2008; the Appeal from the United States District Court for the Northern District of California, No. 07-16356, D.C. No. CV-06-02893-CW Opinion, filed June 19, 2009; the FCC's Report and Order in the Matter of Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991 dated February 15, 2012; the FCC's Notice of Proposed Rulemaking in the Matter of the Middle Class Tax Relief and Job Creation Act of 2012, Establishment of a Public Safety Answering Point Do-Not-Call Registry dated May 22, 2012; the FCC's Declaratory Ruling in the Matter of Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991, SoundBite Communications, Inc. Petition for Expedited Declaratory Ruling dated November 29, 2012; and the FCC's Declaratory Ruling in the Matter of Rules and Regulations Implementing the Telephone

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Consumer Protection Act of 1991 dated July 10, 2015.

4.   I have over 30 years of experience in telecommunications network architecture, system architecture, engineering, design and technology. I am an expert in the fields of both wireline and wireless telecommunications networking technology. I have been retained by both plaintiffs and defendants as a testifying or consulting expert in over 125 cases regarding cellular telecommunications technology, including over 90 TCPA cases.

5.   I have taught many classes and seminars on both wireline and wireless telecommunication network technologies and have been a panelist and speaker at numerous conferences at the Institute of Electrical and Electronics Engineers ("IEEE"), the Personal Communication Society ("PCS"), and the Cellular Telecommunications and Internet Association ("CTIA"). I spent seven years developing standards within the American National Standards Institute's subsidiary organization, the Telecommunications Industry Association ("TIA"), providing technical contributions and authoring and editing telecommunications proposed standards. Most notably, I authored and oversaw the standardization of Interim Standard 93, providing interconnection technology between wireline and wireless networks, which is a fully accredited national standard of the American National Standards Institute ("ANSI").

6.   I am the co-author of the McGraw-Hill books "Mobile Telecommunications Networking with IS-41," and "Wireless Telecommunications Networking with ANSI-41, 2nd edition" published in 1997 and 2001, respectively. I have 29 patents on telecommunications networking technology and currently have five additional published patents pending. I have also authored several articles on telecommunications technology and have been frequently quoted in industry trade publications. I have consulted for the CTIA and many wireline and wireless telecommunications companies, including IBM, Bell Laboratories, McCaw Cellular, AirTouch,

AirTouch International, AT&T Wireless, AT&T Mobility, Lucent, Nokia, Ericsson, Motorola, Samsung, Siemens, Nextwave, MCI, Daewoo, Globalstar, T-Mobile, Sprint, U.S. Cellular, Teleglobe Canada, Teledesic, IBM, Google and other telecommunications technology vendors and service providers. I was also nominated in 2006 for a National Television Arts Emmy Award for Outstanding Achievement in Advanced Media Technology for unique wireless content distribution technology I designed while employed at Entriq, Inc.

7.   Additional details, including authored publications within at least the past ten years, are provided in my attached *curriculum vitae* (a true and correct copy of which is attached hereto as Exhibit A) along with a list of cases where I served as a testifying or consulting expert and my standard rate sheet. I am being compensated at the rate of $450 per hour for my study, analysis and testimony in this case.

8.   I understand that fact discovery in this case is ongoing and I also understand that there are documents and/or evidence that have yet to be produced. To the extent that I cannot currently opine on the technical issues in this case, I hereby reserve the right to supplement this Declaration with both my conclusions and opinions in a detailed and additional supplementary declaration in the future.

INTRODUCTION

9.   It is my understanding that the TCPA defines an automatic telephone dialing system ("ATDS") as "equipment which has the capacity – (i) to store or produce telephone numbers to be called, using a random or sequential number generator; and (ii) to dial such numbers." Additionally, it is my understanding that the Federal Communications Commission ("FCC") has issued regulations that also define an ATDS as including the capacity to dial telephone numbers from a provided list or database of telephone numbers without human

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intervention.

10.   Based on my review of the relevant documents and the facts described above, it is my opinion that the Interactive Intelligence Dialer is an automatic telephone dialing system ("ATDS"). I base this opinion on my knowledge, education, experience, expertise, training and on the evidence I have reviewed.

AUTOMATIC TELEPHONE DIALING FUNCTIONS

11.   Automatic telephone dialing systems used by telemarketing and debt collection companies typically fall into fundamental types of computerized telephone number dialing: *preview* dialing, *basic* automatic dialing, *predictive* dialing and *unattended message* dialing. Note that telephone numbers to be dialed using these automatic dialing functions are organized as "campaigns." A campaign is simply a list of telephone numbers organized by some defined criteria that are to be called for a specific purpose. Each distinct campaign calls the telephone numbers in the list using the same dialing method, which is defined within the campaign setup parameters.

12.   Preview dialing is a method for dialing individual telephone numbers by call center agents. When preview dialing is used, each individual call center agent can "preview" a computerized call record and has the ability to originate a call in various ways. For example, the call center agent can dial the full 10-digit telephone number displayed in the call record; the call center agent can dial a different 10-digit telephone number that may be listed as an alternate number; or the call center agent can "invoke" dialing of the 10-digit telephone number displayed in the call record by clicking a key on the keyboard or using the cursor on the screen to click a "dial" button. In addition, sometimes preview dialing can be automated. This automation is sometimes known as "timed preview dialing." Timed preview dialing automatically dials the

next telephone number in the list once the agent has concluded a call. The next telephone number

to be called is dialed at some predefined time limit for example, 90 seconds. If the agent does not

dial the next number within 90 seconds, the preview dialing system automatically dials the next

telephone number in the list. This mechanism is typically used to maximize the number of calls

dialed and to ensure call center agents are moving quickly through their call record list.

13.   Basic automatic dialing (sometimes known as "power dialing" or "war dialing")

is a computerized method for automatically dialing lists of telephone numbers commonly used in

call center operations. Basic automatic dialing is a type of automatic telephone dialing whereby

the equipment initiates outbound telephone calls without human intervention for sales,

telemarketing, collections or other purposes. Using this very basic type of automatic dialing, the

computerized system dynamically regulates the number of calls to be automatically dialed by

maintaining a simple balance between the number of call center agents currently available, the

number of calls currently in progress and the "dial ratio." The dial ratio is simply the ratio of

telephone lines configured per call center agent involved in a particular calling campaign. Using

this basic mechanism, the number of automatic outbound telephone calls to be dialed by the

computer system can be dynamically regulated (*i.e.*, increased or decreased) over time simply

based on the number of calls in progress, the number of agents and the number of telephone lines

available per agent. Basic automatic dialing can sometimes use an interactive voice response

("IVR") system, whereby an artificial or prerecorded voice message is used to communicate with

the called party and computerized prompts may be used to enable the called party to provide

responses. The artificial or prerecorded voice messages are recorded before the calling campaign

is executed and are stored in audio files that are configured as part of the IVR calling campaign.

14.   Predictive dialing is a computerized method for automatically dialing lists of

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telephone numbers commonly used in call center operations. Predictive dialing is a type of automatic telephone dialing as defined by the FCC to make outbound telephone calls without human intervention for sales, telemarketing, collections or other purposes. Predictive dialing provides the capability to "predict" the availability of call center agents that can respond to the outbound calls that have been dialed by the predictive dialing system and answered by the called party. Prerecorded voice technology may also be used to announce to the called party to wait for a call center agent to respond. Called parties that answer a predictively dialed outbound call typically experience a distinctive and recognizable pause due to the time interval during which the call is redirected back and connected to an available call center agent. In addition, predictive dialing methods enable a variety of programmatic ways to treat calls that have not been answered by the called party. As examples, calls that may be answered by voicemail, calls that receive a busy signal and calls that are not answered, may all be treated and managed differently by the automatic dialing system. "Predictive" dialing necessarily requires certain algorithmic and computerized functionality to operate properly. For example, predictive dialing requires the equipment to perform call progress analysis for each call made to detect ring-back tones, busy tones and the difference of whether a person, answering machine or voicemail system has answered a call. Additionally, automatic predictive dialing requires a "pacing" algorithmic function. Pacing algorithms are the statistical models that perform as the primary function enabling the automatic dialing system to predict the availability and increase the efficiency of the call agents. These complex algorithms are based on various factors such as average call time, number of agents available, number of expected abandoned calls, average number of answering machines detected, time of day, day of week and many, many other factors.

15.   Note that the actual *predictive* functionality of predictive dialers occurs *after* the

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equipment automatically dials telephone numbers from a list of numbers. Therefore, the automatic telephone dialing function of the equipment, *i.e.*, the ability to automatically dial telephone numbers from a list of numbers, occurs prior to the call being connected and *predictively* redirected back to an available call center agent. Thus, predictive dialing is identical to basic automatic dialing with the addition of the automated capability of connecting the called party back to an algorithmically predicted call center agent.

16.   Unattended message dialing (sometimes known as a "message blast" or a "phone blast") is a computerized method for automatically dialing electronic lists of telephone numbers with the intent to only transmit a prerecorded voice message to the called parties once the call is answered. If an answering machine or voicemail system answers the call, the prerecorded voice message can be left as a recording for the called party to listen to later. No call center agents are required and there are no inbound calls to the system. Unattended message calls are always outbound, from an automatic telephone dialing system to a stored electronic list of telephone numbers. The prerecorded voice message is recorded before the calling campaign is executed and is stored in an audio file that is automatically played when the call is answered.

17.   Both basic and predictive automatic dialing require the equipment to perform *call progress analysis* for each automatically initiated call. Call progress analysis automatically detects ring-back tones, busy tones, fast-busy tones, special information tones, answering machines, voicemail systems, a person answering a call, etc. The equipment itself essentially *listens* to the initiated call that is in progress and can be programmed to act in a particular way depending on the result of the call attempt. Call progress analysis capability is a key characteristic of automatic telephone dialing systems. The presence of this function is inherent in the process of automatic dialing and clearly implies the capability of the equipment to

automatically dial telephone numbers without human intervention. This is because the functional process to analyze call progress tones is established prior to the process of electronically signaling out (*i.e.*, dialing) the ten digits of a telephone number. Computerized call progress analysis is inextricably tied to the process of automatic electronic dialing.

18.   Additionally, unattended message dialing, predictive dialing and basic automatic dialing can use prerecorded voice technology to leave a message on an answering machine or a voicemail system if a person does not answer the call. This function, of course, is based on the ability of the equipment to perform call progress analysis so different prerecorded messages can be left when the automatic dialing system detects a person answering versus a voicemail system answering. For example, prerecorded voice technology can be used for predictive dialing to announce to the called party to wait on the line for a call center agent to respond or to leave a prerecorded message on an answering machine.

19.   These types of computerized dialing (*i.e.*, preview, basic, predictive and unattended message dialing) require the automatic system to store telephone numbers to be dialed. The numbers stored electronically are automatically and directly dialed by the dialing system equipment without human intervention. The list of telephone numbers to be dialed by the equipment is made available to the dialing system as part of setting up each call or calling campaign.

THE INTERACTIVE INTELLIGENCE TELEPHONE DIALING SYSTEM

20.   In KFCU's request for production responses, it stated, "Sometime in late 2014 or early 2015, KFCU made certain system upgrades and implemented two (2) new systems including IC Business Manager and Interaction [Desktop] Client, which allows for the recording of incoming and outgoing calls, and further allows for the making of various collection notes and

storage of certain related information." (Exhibit B, ¶ 9.)

21.   In KFCU's interrogatory responses, it stated, "Defendant uses CISCO Systems phones to make calls. The current phones used in the collection department include 'Model Cisco IP Phone 7900 Series'. In addition, said phones are currently used in connection with the IC Business Manager software and Interaction [Desktop] Client software, which allows for the recording of incoming and outgoing calls, and further allows for the making of various collection notes and storage of information." (Exhibit C, ¶ 5.)

22.   Interactive Intelligence Group, Inc. ("Interactive Intelligence") is a company that markets and sells business software and services, including call center software and solutions.

23.   Cisco Systems, Inc. ("Cisco") is a company that markets and sells network technology solutions and communications devices, including desktop telephones for business.

24.   The Cisco IP Phone 7900 Series is a product family comprising sophisticated feature-rich telephone handsets for business use. (Exhibit D.)

25.   The Interaction Desktop Client is an application within the Customer Interaction Center ("CIC") suite of applications. The Interaction Desktop Client application resides on a personal computer and manages electronic communications, including telephone calls. (Exhibit E, Bates No. KFCU1052.)

26.   The Interaction Desktop Client software is designed to be compatible with the Cisco IP Phone 7900 Series. (Exhibit E, Bates No. KFCU1189; Exhibit F.)

27.   The IC Business Manager provides a user interface for access to call management features within the Interactive Intelligence application software modules.

28.   Adapt Telephony Services ("Adapt") provides hosted call center services to its

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customers.[1] Adapt provides these services using call center telephony technology provided by Interactive Intelligence. (Exhibit G.) Adapt provides call center services to Heritage Federal Credit Union ("Heritage") using technology and systems provided by Interactive Intelligence as described in a publicly available case study. (Exhibit H.) This case study demonstrates the overall automatic dialing capabilities of the Interactive Intelligence Dialer system used by a business similar to that of KFCU.

29.   According to this case study, among the reasons Heritage employed the Interactive Intelligence all-in-one IP communications software suite, was the inclusion of multiple applications. The referenced applications include IVR, predictive dialing and unattended messaging, each of which is a function that is a key characteristic of an automatic outbound telephone dialing system.

30.   In addition, the Interaction Desktop Client application and IC Business Manager application are specifically designed to integrate seamlessly with the Interactive Intelligence Dialer. Both applications are designed to integrate with the Interactive Intelligence outbound automatic dialing servers and central campaign server that perform outbound automatic dialing functions. (Exhibit I.[2]) The Interaction Dialer encompasses the automatic dialing functions of the system, including campaign management (*i.e.*, "…the process of contacting a list of people according to a prescribed list of rules."), automatic dialing and predictive dialing. Furthermore, "Campaigns can place outbound telephone calls, play .wav files to answering machines, send faxes to fax machines, and route calls answered by a live person to an interaction Attendant

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[1] http://www.teamadapt.com
[2] http://help.inin.com/cic/mergedProjects/wh_dlr/mergedProjects/dialer_manager_help2/desktop/client_server_architecture.htm

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profile or Dialer agent." (Exhibit J.[3])

31.   The Interaction Dialer supports multiple dialing modes that are typical of commercial automatic telephone dialing systems. These dialing modes include predictive dialing, power dialing, unattended message dialing (agentless dialing) and preview dialing. (Exhibit K.[4])

32.   According to Mr. Delma Powell, vice president of consumer lending, collection representatives (*i.e.*, call center agents) use the Interaction Desktop Client application from their computer screens to initiate calls to cellular telephones of consumers. (Exhibit L, Powell Dep., 76:23-77:20.)

33.   In addition, Mr. Powell stated, "There is a prerecorded message that's delivered at the beginning of every collection call to ensure that we identify ourselves as Keesler and that we are calling for the purpose of collecting a debt." (Exhibit L, 112:24-113:8.) "At that point, there's a voice interaction between the member (*i.e.*, the consumer) and the collector, and there's dialogue." (Exhibit L, 114:24-115:4.)

34.   Prerecorded voice messages are played using the Interaction Attendant function of the Interactive Intelligence Dialer automatic dialing system. (Exhibit M.[5]) The Interaction Attendant function is the name used by Interactive Intelligence for the IVR function of the dialing system.

35.   The ability of a dialing system to deliver (*i.e.*, play) a prerecorded voice message at the beginning of a particular outbound call, as previously described, is dependent on the ability of the automatic dialing system to analyze call progress tones for that call. Therefore, if a prerecorded voice message is played for an outbound call, the call must be an automatically

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[3]http://help.inin.com/cic/mergedProjects/wh_dlr/mergedProjects/dialer_manager_help2/desktop/dialer_architecture_and_database.htm
[4]http://help.inin.com/cic/mergedProjects/wh_dlr/mergedProjects/dialer_manager_help2/desktop/dialing_modes.htm
[5]http://help.inin.com/cic/mergedProjects/wh_iat/desktop/attendant_concepts.htm

dialed call. Furthermore, when a prerecorded message is played at the beginning of an outbound call, the automatic dialing system must transfer the call back to an agent in order for there to be a dialogue between the consumer and the collection representative.

36.   Therefore, because a prerecorded voice message is left at the beginning of every outbound collection call, the initiation of cellular telephone calls by collection representatives cannot be considered *dialing*. Collection representatives, in fact, when initiating an outbound call to cellular telephones, actually only initiate a software process. This software process causes the telephone number digits to be sent into the dialing system. The dialing system then takes those digits and performs what might be considered a version of predictive dialing. The dialing system actually takes the telephone digits, automatically dials those digits and analyzes (*i.e.*, *listens to*) the call progress tones. If a consumer answers the call, then the prerecorded message is played by the IVR system of the dialing system. Once the prerecorded announcement has completed, the call is transferred back (*i.e.*, connected back) to the agent who initiated the software process. This is the same process as predictive dialing except that the call is connected back to a particular collection agent rather than to any agent predicted to be available by the automatic dialing system.

37.   Therefore, the interaction of the collection representatives to initiate outbound calls to cellular telephones is not dialing; rather, it is a mechanism to initiate a software process to automatically dial cellular telephones, play prerecorded voice messages and connect those calls back to the appropriate collection representative.

38.   Therefore, it is my opinion, based on my knowledge, education, experience, expertise, training, my review of the relevant documents and the facts described above that the Interaction Dialer is an automatic telephone dialing system.

39.   Furthermore, it is my opinion that collection representatives do not dial calls using the Interaction Desktop Client application. Collection representatives initiate a software process that invokes the Interactive Intelligence Dialer to perform the actual outbound dialing automatically, automatically play prerecorded voice messages when the call is answered and, if so, automatically connect those outbound calls back to particular collection representatives.

THE TCPA AND AUTOMATIC TELEPHONE DIALING SYSTEMS

40.   For ease of reference, this section simply presents the TCPA and FCC definitions that I understand, from Plaintiff's attorneys, to be the most applicable to my analysis in this case.

41.   The TCPA defines an ATDS as "equipment which has the capacity— (i) to store or produce telephone numbers to be called, using a random or sequential number generator; and (ii) to dial such numbers." *See* 47 U.S.C. § 227(a)(1)).

42.   In the FCC's Report and Order of July 3, 2003, the Commission stated the following:

> "The statutory definition contemplates autodialing equipment that either stores or produces numbers. It also provides that, in order to be considered an 'automatic telephone dialing system,' the equipment need only have the '*capacity* to store or produce telephone numbers (emphasis added)...' It is clear from the statutory language and the legislative history that Congress anticipated that the FCC, under its TCPA rulemaking authority, might need to consider changes in technologies. In the past, telemarketers may have used dialing equipment to create and dial 10-digit telephone numbers arbitrarily. As one commenter points out, the evolution of the teleservices industry has progressed to the point where using lists of numbers is far more cost effective. The basic function of such equipment, however, has not changed—the capacity to dial numbers without human intervention. We fully expect automated dialing technology to continue to develop." (¶ 132.)
>
> "[T]o exclude from these restrictions equipment that use predictive dialing software from the definition of 'automated telephone dialing equipment' simply because it relies on a given set of numbers would lead to an unintended result. Calls to emergency numbers, health care facilities, and wireless numbers would be permissible when the dialing equipment is

paired with predictive dialing software and a database of numbers, but prohibited when the equipment operates independently of such lists and software packages. We believe the purpose of the requirement that equipment have the "capacity to store or produce telephone numbers to be called" is to ensure that the prohibition on autodialed calls not be circumvented. Therefore, the Commission finds that a predictive dialer falls within the meaning and statutory definition of 'automatic telephone dialing equipment' and the intent of Congress." (¶ 133.)

43.   The FCC's Report and Order of January 4, 2008 stated the following:

"The commission noted that the evolution of the teleservices industry had progressed to the point where dialing lists of numbers was far more cost effective, but that the basic function of such dialing equipment, had not changed—the capacity to dial numbers without human intervention. The Commission noted that it expected such automated dialing technology to continue to develop and that Congress had clearly anticipated that the FCC might need to consider changes in technology." (¶ 13.)

"…calls to emergency numbers, health care facilities, and wireless numbers are permissible when the dialing equipment is paired with predictive dialing software and a database of numbers, but prohibited when the equipment operates independently of such lists, would be inconsistent with the avowed purpose of the TCPA and the intent of Congress in protecting consumers from such calls." (¶ 14.)

44.   In the FCC's Notice of Proposed Rulemaking of May 22, 2012, the Commission stated the following:

"Under the TCPA, the term "automatic telephone dialing system" is defined as 'equipment which has the capacity– (A) to store or produce telephone numbers to be called, using a random or sequential number generator; and (B) to dial such numbers.' Id. at § 227(a)(1). The Commission has emphasized that this definition covers any equipment that has the specified capacity to generate numbers and dial them without human intervention whether or not the numbers called are randomly or sequentially generated or come from calling lists." (p.4, footnote 12.)

45.   In the most recent FCC Declaratory Ruling and Order of July 10, 2015, the Commission stated the following:

"We reaffirm our previous statements that dialing equipment generally has the capacity to store or produce, and dial random or sequential numbers (and thus meets the TCPA's definition of 'autodialer') even if it is not

presently used for that purpose, including when the caller is calling a set list of consumers. We also reiterate that predictive dialers, as previously described by the Commission, satisfy the TCPA's definition of 'autodialer' for the same reason. We also find that callers cannot avoid obtaining consent by dividing ownership of pieces of dialing equipment that work in concert among multiple entities." (¶ 10.)

"The Commission declined to distinguish between calls to wireless telephone numbers made by dialing equipment 'paired with predictive dialing software and a database of numbers' and calls made 'when the equipment operates independently of such lists and software packages.' Recognizing the developments in calling technology, the Commission found that '[t]he basic function of such equipment, however, has not changed—the capacity to dial numbers without human intervention.' The Commission found it troubling that predictive dialers, like dialers that utilize random or sequential numbers instead of a list of numbers, retain the capacity to dial thousands of numbers in a short period of time and that construing the autodialer definition to exclude predictive dialers could harm public safety by allowing such equipment to be used to place potentially large numbers of non-emergency calls to emergency numbers, a result the TCPA was intended to prevent. The Commission concluded that the TCPA's unqualified use of the term 'capacity. was intended to prevent circumvention of the restriction on making autodialed calls to wireless phones and emergency numbers and found that "a predictive dialer falls within the meaning and statutory definition of 'automatic telephone dialing equipment' and the intent of Congress." (¶ 14.)

SUMMARY OF OPINIONS

46.   Based on my knowledge, education, experience, expertise, training and the facts described above, it is my opinion that the Interaction Dialer is an automatic dialing system that provides multiple types of automatic dialing functions, including predictive dialing, power dialing, unattended message dialing (agentless dialing) and preview dialing. These automatic dialing functions dial telephone numbers that are provided to the dialing system as file lists stored within the system. The telephone numbers stored in the file lists are automatically dialed by the dialing system equipment.

47.   Based on my knowledge, education, experience, expertise, training and the facts described above, it is my opinion that collection representatives do not dial cellular telephone

calls using the Interaction Desktop Client application; rather the Interactive Intelligence Dialer automatically dials those calls. Collection representatives only initiate a software process that invokes the Interactive Intelligence Dialer to perform the actual outbound dialing automatically, automatically play prerecorded voice messages when the call is answered and, if so, automatically connect those outbound calls back to particular collection representatives.

48.   Therefore, it is my opinion that the Interaction Dialer automatically dials telephone numbers from a list or database of numbers without human intervention. Thus, the Interaction Dialer automatic telephone dialing system qualifies as an ATDS.

49.   My opinions in this Declaration are based upon extensive experience in the telecommunications industry, a detailed understanding of telecommunications systems and a detailed understanding of automatic telephone dialing systems. I hereby reserve the right to supplement or modify my opinions detailed in this report to the extent that new information is made available through discovery or other means.

I declare that the foregoing is true and correct subject to the laws of perjury of the United States.

Executed in Las Vegas, Nevada, on this 7th day of September, 2016.

Randall A. Snyder

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                Randall A. Snyder

EXHIBIT A

Randall A. Snyder
Curriculum Vitae

Professional Summary

Mr. Snyder has over 30 years of experience in telecommunications network and system architecture, engineering, design and technology. He has expertise in the fields of both wireline and wireless telecommunications networking technology and has been retained as a testifying or consulting expert witness in over 125 cases regarding cellular telecommunications technology.

Mr. Snyder has taught many classes and seminars on both wireline and wireless telecommunication network technologies and has been a panelist and speaker at numerous conferences at the Institute of Electrical and Electronics Engineers (IEEE) and the Cellular Telecommunications and Internet Association (CTIA). He spent several years developing network technology standards within the American National Standards Institute (ANSI) and the Telecommunications Industry Association (TIA), providing technical contributions and authoring and editing telecommunications proposed standards documents. Most notably, ANSI-93, providing interconnection technology between wireline and wireless telecommunications networks.

Mr. Snyder is the co-author of the McGraw-Hill books "Mobile Telecommunications Networking with IS-41," and "Wireless Telecommunications Networking with ANSI-41, 2nd edition" published in 1997 and 2001, respectively. He holds 29 patents on telecommunications networking technology and has been hired as a consultant by the CTIA, as well as many wireline and wireless telecommunications companies, including Bell Laboratories, IBM, Google, McCaw Cellular, AirTouch, AirTouch International, AT&T Wireless, AT&T Mobility, Lucent, Nokia, Ericsson, Motorola, Samsung, Siemens, Nextwave, MCI, Daewoo, Globalstar, T-Mobile, Sprint, U.S. Cellular, Teleglobe Canada, Teledesic and others. He was also nominated in 2006 for a National Television Arts Emmy Award for Outstanding Achievement in Advanced Media Technology for unique wireless content distribution technology he designed while at Entriq, Inc.

Subject Matter Expertise

- Wireless and cellular network systems
- Wireless and cellular network architectures
- Network interconnectivity
- GSM, UMTS, LTE and ANSI-41 (CDMA) standards and networks
- Location Based Services (LBS)
- Short Message Service (SMS)
- Multimedia Message Service (MMS)
- Wireless Application Protocol (WAP)

- Call Processing and Calling Features
- Billing Systems Support (BSS)
- Operations, Administration, Maintenance & Provisioning (OAM&P, OSS)
- Signaling System No. 7 (SS7)
- LTE Diameter Signaling
- Multifrequency Signaling
- Automatic Telephone Dialing Systems (ATDS)

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Randall A. Snyder
Curriculum Vitae

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Notable Expert Witness Engagements

- Retained as Plaintiff's testifying expert witness in *Satterfield v. Simon & Schuster, Inc.* No. 07-16356, D.C. No. CV-06-02893-CW Opinion. Appeal from the United States District Court for the Northern District of California. Opinion remanded by the United States Court of Appeals for the Ninth Circuit. Personally cited in opinion by N.R. Smith, Circuit Judge, June 19, 2009.

  Result of expert opinion greatly expanded the TCPA and was followed by formal FCC Declaratory Rulings citing this case that text messages are calls as defined by the TCPA, and sending messages to a stored electronic list of telephone numbers falls within the definition of an Automatic Telephone Dialing System (ATDS).

- Retained as Plaintiff's testifying expert witness in *Gomez v. Campbell-Ewald Company*. No. 13-55486, D.C. No. 2:10-CV-02007-DMG-CW Opinion. Appeal from the United States District Court for the Central District of California. Opinion vacated by the United States Court of Appeals for the Ninth Circuit. Opinion by Fortunato P. Benavides, Circuit Judge. Filed September 19, 2014. Appellate court opinion upheld by the Supreme Court of the United States. Opinion by Justice Ginsburg, January 20, 2016.

- Retained by the Department of Justice Canada as Plaintiff's consulting expert in *Commissioner of Competition v. Rogers Communications Inc., Bell Canada, Telus Corporation and the Canadian Wireless Telecommunications Association*. Defendants accused of deceptive and misleading marketing practices related to premium text messages leading to improper charging for multimedia content delivery using various mobile billing mechanisms. Case settled favorably for the Canada Competition Bureau in May, 2016.

- Retained by IBM de México as testifying expert witness in *IBM de México Comercialización y Servicios, S. de R.L. de C.V. adverse Iusacell, S.A. de C.V.* International $4B material breach of contract case under the International Chamber of Commerce International Court of Arbitration. A decision is currently being deliberated by the international court.

Education

Year	College or University	Degree
1984	Franklin and Marshall College	B.A., Mathematics (minor in Astronomy)

> **Randall A. Snyder**
> **Curriculum Vitae**

Professional Experience

From:	January 2007
To:	Present
Organization:	Wireless Research Services, LLC; Las Vegas, NV
Title:	President and Founder
Summary:	Technology and expert witness consulting services. Areas of subject matter expertise include mobile and cellular networking, 2G, 2.5G, 3G, LTE, GSM, ANSI-41, LBS, SMS, MMS, WAP, SS7, Diameter Signaling, Automatic Telephone Dialing Systems (ATDS) and mobile multimedia systems. With this expertise, primary consulting is in the area of system and product analysis, architecture, design, development, management and marketing as well as patent preparation and development, expert reports, expert testimony and litigation support. Particular areas of expert witness experience include patent litigation and the Telephone Consumer Protection Act (TCPA).

From:	September 2007
To:	August 2010
Organization:	Finsphere Corporation; Bellevue, WA
Title:	Vice President Product Management & Wireless Engineering
Summary:	Was among the first handful of employees at Finsphere prior to Series A funding. As vice president of product management and wireless engineering and a member of the executive management team, was responsible for product management activities and wireless technology solutions for Finsphere's products. These products encompassed mobile location based software-as-a-service (SaaS) products offered primarily to financial institutions and banks. Responsibilities included product requirements and system functionality, strategic planning, R&D of new technologies, wireless network interconnectivity as well as wireless technology for Finsphere's products. Was also responsible for market strategies, white papers and development and management of intellectual property and patent applications.

From:	May 2004
To:	April 2007
Organization:	Entriq, Inc.; Carlsbad, CA
Title:	Vice President Product Management
Summary:	Was responsible for the entire product management team and system architecture for Entriq's products and services. Products encompassed mobile and broadband pay media applications (specializing in video), digital rights management (DRM) and security solutions, e-commerce and m-commerce systems as well as ad management and delivery solutions for both broadband and mobile media services. Responsibilities also included network and protocol analysis, market analysis, evaluation of third-party software and services, all vendor contract negotiations, RFP responses and overall administrative responsibility for the entire product line. Was responsible for directing

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and managing the technical writing department producing all user documentation associated with the products. Was nominated for a National Television Arts and Sciences Emmy Award for Outstanding Achievement in Advanced Media Technology for unique mobile technology designed, developed and commercially deployed as part of Entriq's solution.

From:	February 2002
To:	November 2003
Organization:	m-Qube, Inc. (acquired by Verisign); Boston, MA
Title:	Vice President Product Management and Carrier Marketing and Founder
Summary:	Was responsible for the entire product management and carrier marketing teams, member of the executive management team and one of the founders. Was responsible for all product management, system engineering and product strategy for all business conducted with the wireless industry and carriers. Was in charge of the market strategy and wireless network architecture for m-Qube's mobile marketing service, a value-added service offering mobile marketing solutions to wireless carriers using short message services (SMS) for GSM and CDMA networks. The service architecture enabled branded companies to deploy promotional marketing and messaging campaign dialogs with mobile subscribers via SMS. The network architecture required definition and design of all aspects of the overall network including SMS technology, interconnectivity to the wireless carriers, signaling, traffic management, market requirements for features and services, network equipment specifications and OA&M.

From:	April 2001
To:	February 2002
Organization:	Bitfone Corporation; Mountain View, CA
Title:	Vice President Product Management and Marketing
Summary:	Was responsible for the entire product management team and all of the company's product definitions, strategies and positioning. Had direct responsibility for market and product requirements, market research, competitive analysis, product strategy and sales strategy. Bitfone's products included the iBroker, a mobile Internet technology infrastructure platform to enhance WAP, MMS, mobile e-mail and wireless messaging. Was also responsible for the mProve product (obtained via merger with Digital Transit, Inc.) providing over-the-air firmware and software update technology to mobile devices.

From:	November 2000
To:	April 2001
Organization:	Openwave Systems (via merger of Phone.com and Software.com); Redwood City, CA
Title:	Executive Director Emerging Technologies
Summary:	Was responsible for new 3G technologies and providing market and product plans for those technologies for the entire product line. Primary responsibility for the 3GPP Multimedia Messaging Service (MMS), collecting market requirements from customers, developing corporate strategy for MMS and preparing the organization for

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additional development of the product. In addition, taught wireless technology classes to the different departments at Openwave and educated them on wireless service provider strategies and network technologies.

From:	March 2000
To:	November 2000
Organization:	@Mobile and Software.com (via acquisition); Santa Barbara, CA
Title:	Director Wireless Product Management
Summary:	Was responsible for the product managers and for all of the wireless internet infrastructure products. Responsibilities included the overall market and product strategy for Software.com's wireless e-mail, short message service, instant messaging and unified messaging products. Was responsible for the overall revenues generated from these products based on detailed product plans and internal organizational planning. Much of his time was spent working with the executive management team and the sales directors on corporate market strategy.

From:	December 1999
To:	March 2000
Organization:	FreeSpace Communications, Inc.; Palo Alto, CA
Title:	Consulting Network Systems Engineer
Summary:	Was responsible for the complete design of the backbone network architecture for a new broadband fixed wireless data network. This new architecture incorporated DSL as the backbone network technology. The network architecture required definition and design of all aspects of the overall network plan including DSL technology, IP technology, ATM technology, interconnectivity to the PSTN, operations signaling, traffic engineering, market requirements for network features and services, network equipment specifications and OA&M.

From:	April 1992
To:	December 1999
Organization:	Synacom Technology, Inc.; San Jose, CA
Title:	Executive Director Product Marketing and Management
Summary:	

1998 – 1999   Executive Director Product Marketing and Management

- Responsible for managing the entire product management and marketing department of Synacom Technology, including market research and planning, product management and market communications. Lead the entire design, definition and product direction of all aspects of Synacom's products.

1997 – 1998   Director Systems Engineering

- Responsible for coordinating and managing the overall functional and requirements specifications for all Synacom's products as well as the detailed test

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plans used for alpha system testing of those products. Also responsible for directing and managing the technical writing department producing all of the user documentation associated with all of the products. Provided the primary sales engineering support for sales and marketing and was involved in nearly every aspect of the product lifecycle.

1996 – 1997

Director Consulting Services and Principal Engineer

- Responsible for obtaining, coordinating and managing all technical consulting projects performed by the company. These projects included wireless network architecture and design for both IS-41 and GSM networks for dozens of client companies (carriers and equipment manufacturers). In this role, continued as a member of both the ANSI/TIA TR45.2 Subcommittee for cellular radio intersystem operations standards and the ANSI/TIA TR46 Committee for 1900 MHz GSM PCS standards. Major contributor to TR46 in the area of GSM-to-IS-41 network interworking. Also authored, edited and published TIA standard specification IS-93 for cellular network interconnections to the PSTN and ISDN.

1992 – 1996

Principal Engineer

- Consulted for McCaw Cellular, AT&T Wireless, AirTouch Cellular, AirTouch Satellite Services, Globalstar, Nokia, MCI, Sprint PCS, XYPoint, NextWave, NewNet American Personal Communications, CTIA and several other national and international wireless telecommunications companies.

- Wrote wireless network design and analysis papers including HLR specifications, Authentication Center specifications, PCS network design, short message service (SMS) design, intelligent network applications of wireless technology and in-house expert in signaling protocols. Extensive experience with Signaling System No. 7, including both protocol implementation and design. Authored the Standard Requirements Document for the SS7-based A-interface between the base station and MSC used throughout the TIA. Also involved in the design of the Bellcore WACS/PACS technology, digital cellular network service and feature descriptions, SCPs and HLRs. Extensive experience developing the architecture and design of distributed intelligent networks including, SS7, cellular, PCS, AIN and WIN networks. Key member of the original Cellular Digital Packet Data (CDPD) architecture and design team. Designed the CDPD air interface protocol emulator developed and marketed by AirLink Communications, Inc.

From: December 1990
To: April 1992
Organization: AT&T Bell Laboratories; Whippany, NJ
Title: Consulting Member of the Technical Staff
Summary: Evaluated wireless technology services for the Wireless Systems Architecture group. Also participated as a system engineer on the design of the Global System for Mobile (GSM) communication architecture and a software engineer developing the base station controller (BSC) for GSM. Also responsible for planning, coordinating, designing and testing the SS7 protocol software for the GSM A-interface between the BSC, MSC and operations and maintenance center (OMC). High-level and detailed

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design specifications were developed to coordinate the protocol testing between two remote laboratories. Provided the traffic analysis and traffic engineering of call traffic for the BSC. Specifically designed and developed the dynamic traffic overload control subsystem for the BSC. Presentations were given to technical staffs at multiple Bell Laboratories facilities supporting this work.

From:	May 1987
To:	December 1990
Organization:	DGM&S, Inc.; Mt. Laurel, NJ
Title:	Senior Staff Consultant
Summary:	Responsible for the design, development and test coordination of an advanced intelligent network applications platform for a service control point (SCP). Also spent several years as a consulting software engineer for Siemens AG, developing and testing SS7 and call control software for the EWSD digital switching system for international as well as U.S. national network implementations. This work involved extensive travel to both Frankfurt and Munich, Germany for software system design and testing. Also involved in the concept, design and technical marketing of proprietary enabling technology software products for SS7 and ISDN.

From:	May 1986
To:	May 1987
Organization:	ADP, Inc.; Mt. Laurel, NJ
Title:	Senior Software Engineer and Analyst
Summary:	Responsible for the design and development of data communications and real time database application software for a host data center that provided real time financial information to large brokerage houses. Data communication protocol expertise in HDLC, RS-232 and IBM BiSync.

From:	June 1984
To:	May 1986
Organization:	C3, Inc.; Cape May, NJ
Title:	Consulting Systems Analyst and Software Engineer
Summary:	Civilian consulting systems analyst and engineer to the U.S. Coast Guard Electronics Engineering Center (EECEN) for C3, Inc. Developed sophisticated database software for shipboard use including inventory and law enforcement applications. The work included the follow-through of the entire project lifecycle including writing of requirements, functional, design and program specifications, coding, debugging, alpha and beta testing, release, shipboard installation and continuing technical support of the product. Received a personal commendation from Admiral W.F. Merlin, Chief, Office of Command, Control and Communications, for successful efforts on these projects.

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Professional Affiliations, Achievements & Awards

- Personal commendation from Admiral W.F. Merlin, Chief, Office of Command, Control and Communications, USCG (1986)
- Nominated, Technology and Engineering Emmy Award for Outstanding Achievement in Advanced Media Technology, 2006

Patents, Publications & Citations

Issued Patents

Patent	Date	Description
US 9,185,123	11/10/2015	Systems and Method for Mobile Identity Protection for Online User Authentication
US 9,154,952	10/6/2015	Systems and Methods for Authenticating a User of a Computer Application, Network, or Device Using a Wireless Device
US 9,092,803	7/28/2015	System and Method to Initiate a Mobile Data Communication Utilizing a Trigger System
US 8,954,102	2/10/2015	System and Method for Determining and Delivering Appropriate Multimedia Content to Data Communication Devices
US 8,938,215	1/20/2015	System and Method to Initiate a Mobile Data Communication Utilizing a Trigger System
US 8,923,902	12/30/2014	Mobile Messaging Short Code Translation and Routing System and Method
US 8,839,394	9/16/2014	Systems and Methods for Authenticating a User of a Computer Application, Network, or Device Using a Wireless Device
US 8,831,564	9/9/2014	System and Method for Mobile Identity Protection Using Mobile Device Signaling Network Derived Location Pattern Recognition
US 8,819,141	8/26/2014	Centralized Mobile and Wireless Messaging Opt-out Registry System and Method
US 8,761,732	6/24/2014	System and Method to Initiate a Mobile Data Communication Utilizing a Trigger System
US 8,670,753	3/11/2014	System and Method for Determining and Delivering Appropriate Multimedia Content to Data Communication Devices
Israel 200949	1/10/2014	System and Method for Automated Analysis Comparing a Wireless Device Location with Another Geographic Location
Mexico 308720 B	12/4/2013	Sistema y Metodo para el Analisis Automatizado que Compara una Ubicacion del Dispositivo Inalambrico con Otra Ubicacion Geografica

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US 8,588,748	11/19/2013	System and Method for Mobile Identity Protection of a User of Multiple Computer Applications, Networks or Devices
US 8,437,784	5/7/2013	System and Method to Initiate a Mobile Data Communication Utilizing a Trigger System
US 8,374,634	2/12/2013	System and Method for Automated Analysis Comparing a Wireless Device Location with Another Geographic Location
US 8,280,348	10/2/2012	System and Method for Mobile Identity Protection Using Mobile Device Signaling Network Derived Location Pattern Recognition
US 8,155,677	4/10/2012	Mobile Messaging Short Code Translation and Routing System and Method
New Zealand 580499	8/31/2012	System and Method for Automated Analysis Comparing a Wireless Device Location with Another Geographic Location
US 8,131,262	3/6/2010	System and Method to Initiate a Mobile Data Communication Utilizing a Trigger System
US 8,116,731	2/14/2012	System and Method for Mobile Identity Protection of a User of Multiple Computer Applications, Networks or Devices
Australia 2008/115299	2/9/2012	System and Method for Automated Analysis Comparing a Wireless Device Location with Another Geographic Location
S. Africa 2009/06947	1/26/2011	System and Method for Automated Analysis Comparing a Wireless Device Location with Another Geographic Location
US 7,792,518	9/7/2010	System and Method to Initiate a Mobile Data Communication Utilizing a Trigger System
US 7,403,788	7/22/2008	System and Method to Initiate a Mobile Data Communication Utilizing a Trigger System
US 6,128,389	10/3/2000	Authentication Key Management System and Method
US 5,970,144	10/19/1999	Secure Authentication-Key Management System and Method for Mobile Communications
US 5,850,445	12/15/1998	Authentication Key Management System and Method
US 5,799,084	8/25/1998	System and Method for Authenticating Cellular Telephonic Communication

Publications

1. <u>What Workers Want from Wireless</u> by Randall A. Snyder; April 15, 2004. America's Network, Advanstar Communications, Santa Ana, California USA.

2. Snyder, Randall A. and Gallagher, Michael D. <u>Wireless Telecommunications Networking with ANSI-41 Second Edition</u>; McGraw-Hill, New York, NY USA; © Copyright 2001 Randall A. Snyder and Michael D. Gallagher. *Foreword by Tom Wheeler, current Chairman, Federal Communications Commission.*

3. <u>Forecasting SS7 Traffic</u> by Randall A. Snyder; November 1, 2000. Wireless Review, Volume 17, Number 21, Intertec Publishing, Overland Park, KS USA.

4. Gallagher, Michael D. and Snyder, Randall A. <u>Mobile Telecommunications Networking with IS-41</u>; McGraw-Hill, New York, NY USA; © Copyright 1997 Michael D. Gallagher and Randall A. Snyder.

5. <u>IS-41/GSM Interoperability</u> by Randy Snyder; December, 1995, Cellular Networking Perspectives, Cellular Networking Perspectives, LTD, Calgary, Alberta, Canada.

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Citations

1. Commendation from Admiral W.F. Merlin, Chief, Office of Command, Control and Communications, USCG (1986)

2. Method and Apparatus for Routing Short Messages, US Patent #6308075, Issued October 23, 2001.

3. Mediation Software for Delivery of Interactive Mobile Messaging and Personalized Content to Mobile Devices. Patent Application # 20020120779, August 29, 2002.

4. Automatic In-Line Messaging System, US Patent #6718178, Issued April 6, 2004.

5. Method and System for Wireless Instant Messaging, US Patent #7058036, Issued June 6, 2006.

6. United States Court of Appeals for the Ninth Circuit. Satterfield v. Simon & Schuster, Inc. No. 07-16356, D.C. No. CV-06-02893-CW Opinion. Appeal from the United States District Court for the Northern District of California. Opinion by N.R. Smith, Circuit Judge. Filed June 19, 2009.

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Litigation Support Experience

Expert Engagement:

Type of Matter:	Intellectual property (patents) related to short message service (SMS) technology
Law Firm:	United States Department of Justice (DOJ)
Case Name:	CellCast Technologies, LLC v. The United States of America
Services Provided:	Testifying expert for plaintiff
Disposition:	Ongoing
Date:	2016

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to unlawful cellular telephone calls
Law Firm:	McGuire Law, P.C.
Case Name:	Katz v. American Honda Motor Co., Inc.
Services Provided:	Testifying expert, expert reports for plaintiff
Disposition:	Ongoing
Date:	2016

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to unlawful cellular telephone calls
Law Firm:	Bursor & Fisher, P.A.
Case Name:	Morris v. SolarCity Corp.
Services Provided:	Testifying expert for plaintiff
Disposition:	Ongoing
Date:	2016

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to unlawful cellular telephone calls
Law Firm:	Bursor & Fisher, P.A.
Case Name:	Yerkes v. RGS, Financial, Inc.
Services Provided:	Testifying expert for plaintiff
Disposition:	Ongoing
Date:	2016

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to short message service (SMS) technology
Law Firm:	Keller Rohrback, L.L.P.
Case Name:	Wick v. Twilio, Inc.
Services Provided:	Consulting expert for plaintiff
Disposition:	Ongoing
Date:	2016

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Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to
                         unlawful cellular telephone calls
Law Firm: Edelman, Combs, Latturner & Goodwin, LLC
Case Name: Bailey v. Santander Consumer USA, Inc.
Services Provided: Testifying expert for plaintiff
Disposition: Ongoing
Date: 2016

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                         related to unlawful cellular telephone calls
Law Firm: Bailey & Glasser LLP
Case Name: Newhart v. Quicken Loans, Inc. et al.
Services Provided: Testifying expert for plaintiff
Disposition: Ongoing
Date: 2016

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to
                         unlawful cellular telephone calls
Law Firm: Manchee & Manchee, PC
Case Name: Gibbs v. Ocwen Loan Servicing, LLC
Services Provided: Testifying expert for plaintiff
Disposition: Ongoing
Date: 2016

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to short
                         message service (SMS) technology
Law Firm: Law Office of Troy D. Krenning, LLC
Case Name: Newton v. Comdata, Inc.
Services Provided: Testifying expert for plaintiff
Disposition: Settled
Date: 2016

Expert Engagement:

Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to
                         unlawful cellular telephone calls
Law Firm: Maney & Gordon, P.A.
Case Name: Holland v. Keesler Federal Credit Bureau
Services Provided: Testifying expert for plaintiff
Disposition: Ongoing
Date: 2016

Expert Engagement:

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Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to unlawful cellular telephone calls
Law Firm:	Sulaiman Law Group, Ltd.
Case Name:	Deaderick v. Contract Callers, Inc.
Services Provided:	Testifying expert for plaintiff
Disposition:	Withdrawn
Date:	2016

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to short message service (SMS) technology
Law Firm:	Manning Law APC
Case Name:	Vizcarra v. Macys.com Inc. et al.
Services Provided:	Testifying expert, expert reports for plaintiff
Disposition:	Settled
Date:	2016

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to short message service (SMS) technology
Law Firm:	McGuire Law, P.C.
Case Name:	Spencer v. Kohl's Department Stores, Inc.
Services Provided:	Testifying expert, expert reports for plaintiff
Disposition:	Ongoing
Date:	2016

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to unlawful cellular telephone calls
Law Firm:	Parisi & Havens LLP
Case Name:	Slovin v. SunRun. Inc.
Services Provided:	Testifying expert for plaintiff
Disposition:	Ongoing
Date:	2016

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to unlawful cellular telephone calls
Law Firm:	Law Office of Chris R. Miltenberger, PLLC
Case Name:	Harrington v. RoundPoint Mortgage Servicing Corporation
Services Provided:	Testifying expert for plaintiff
Disposition:	Ongoing
Date:	2016

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to short message service (SMS) technology

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Law Firm:	McGuire Law, P.C.
Case Name:	Zeidel v. A&M (2015) LLC
Services Provided:	Testifying expert, expert reports for plaintiff
Disposition:	Ongoing
Date:	2015 – 2016

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to unlawful cellular telephone calls
Law Firm:	Marquis Aurbach Coffing
Case Name:	Fisher v. MJ Christensen Jewelers, LLC
Services Provided:	Testifying expert, expert reports for plaintiff
Disposition:	Ongoing
Date:	2015 – 2016

Type of Matter:	Competition Act, § 74.1 R.S.C. 1985, c. C-34 class action related to false and misleading advertisements related to premium text messaging and short message service (SMS) technology
Law Firm:	Department of Justice Canada
Case Name:	Commissioner of Competition v. Rogers Communications Inc., Bell Canada, Telus Corporation and the Canadian Wireless Telecommunications Association
Services Provided:	Consulting expert for plaintiff
Disposition:	Settled
Date:	2013 – 2016

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to unlawful cellular telephone calls
Law Firm:	Maney & Gordon, P.A.
Case Name:	Ritter v. Wells Fargo Bank, N.A.
Services Provided:	Testifying expert for plaintiff
Disposition:	Settled
Date:	2015

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to short message service (SMS) technology
Law Firm:	Bock & Hatch, LLC
Case Name:	Kozlow v. Shopkick, Inc.
Services Provided:	Testifying expert for plaintiff
Disposition:	Withdrawn
Date:	2015

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to unlawful cellular telephone calls
Law Firm:	Edelson PC

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Case Name:	Suttles v. Mutual of Omaha Insurance Company
Services Provided:	Testifying expert, expert reports for plaintiff
Disposition:	Ongoing
Date:	2015

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to unlawful cellular telephone calls
Law Firm:	Manchee & Manchee, PC
Case Name:	Gebray v. Ocwen Loan Servicing, LLC
Services Provided:	Testifying expert, expert reports for plaintiff
Disposition:	Ongoing
Date:	2015

Expert Engagement:

Type of Matter:	California Invasion of Privacy Act (Penal Code §§ 630) class action related to unlawful recording of telephone conversations
Law Firm:	Keller Grover LLP and Law Offices of Scot D. Bernstein
Case Name:	Saunders v. Cabela's Incorporated
Services Provided:	Testifying expert, expert reports for plaintiff
Disposition:	Ongoing
Date:	2015

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to short message service (SMS) technology
Law Firm:	McGuire Law, P.C.
Case Name:	Lozano v. Avenue Stores, LLC
Services Provided:	Consulting expert for plaintiff
Disposition:	Settled
Date:	2015

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to short message service (SMS) technology
Law Firm:	Bailey & Glasser LLP
Case Name:	Phillips v. Mozes, Inc. et al.
Services Provided:	Testifying expert, expert reports, depositions for plaintiff
Disposition:	Ongoing
Date:	2015

Expert Engagement:

Type of Matter:	Intellectual property (patents) related to mobile location based technology and short message service (SMS) technology
Law Firm:	Knobbe, Martens, Olson & Bear, LLP
Case Name:	TeleCommunication Systems, Inc. v. Airbus DS Communications, Inc.
Services Provided:	Testifying expert for defendant

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Disposition: Settled
Date: 2015

Expert Engagement:
Type of Matter: Intellectual property (patents) related to machine-to-machine (M2M) mobile
                    technology
Law Firm: Paul Hastings LLP
Case Name: M2M Solutions LLC v. Novatel Wireless Solutions, Inc.
Services Provided: Testifying expert, USPTO affidavits for patent reexamination for defendant
Disposition: Ongoing
Date: 2015

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                    related to short message service (SMS) technology
Law Firm: Mazie Slater Katz & Freeman LLC
Case Name: Meyer v. Bebe Stores Inc.
Services Provided: Testifying expert for plaintiff
Disposition: Ongoing
Date: 2015

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                    related to short message service (SMS) technology
Law Firm: Strategic Legal Practices, APC
Case Name: Haghayeghi v. Guess Inc.
Services Provided: Testifying expert for plaintiff
Disposition: Ongoing
Date: 2015

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to
                    unlawful cellular telephone calls
Law Firm: Bailey & Glasser LLP
Case Name: Stein v. Monterey Financial Services, Inc.
Services Provided: Testifying expert, expert reports for plaintiff
Disposition: Ongoing
Date: 2015

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to
                    unlawful cellular telephone calls
Law Firm: Aronovitz Law
Case Name: McKee v. Navient Solutions, Inc.
Services Provided: Testifying expert for plaintiff
Disposition: Ongoing

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Date: 2015

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                     related to short message service (SMS) technology
Law Firm: Butsch Roberts & Associates, LLC
Case Name: Moore v. Family Dollar Stores, Inc.
Services Provided: Testifying expert, expert reports for plaintiff
Disposition: Settled
Date: 2015

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to
                     unlawful cellular telephone calls
Law Firm: Bailey & Glasser LLP
Case Name: Jones v. FMS Corp., U.S. Department of Education
Services Provided: Testifying expert for plaintiff
Disposition: Settled
Date: 2015

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                     related to short message service (SMS) technology
Law Firm: Tycko & Zavareei LLP
Case Name: Lathrop v. Uber Technologies, Inc.
Services Provided: Testifying expert for plaintiff
Disposition: Ongoing
Date: 2015

Expert Engagement:
Type of Matter: California Invasion of Privacy Act (Penal Code §§ 630) class action related to
                     unlawful recording of telephone conversations
Law Firm: Keller Grover LLP and Law Offices of Scot D. Bernstein
Case Name: Roberts v. Wyndham International, Inc.
Services Provided: Testifying expert, expert reports, depositions for plaintiff
Disposition: Settled
Date: 2015

Expert Engagement:
Type of Matter: Intellectual property (patents) related to short message service (SMS) technology
Law Firm: Paul Hastings LLP
Case Name: Nova Transforma Technologies, LLC v. AT&T Mobility LLC
Services Provided: Consulting expert, USPTO affidavits for patent reexamination for defendant
Disposition: Settled
Date: 2015

Expert Engagement:

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Randall A. Snyder
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Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to
                       unlawful cellular telephone calls
Law Firm: Maney & Gordon, P.A.
Case Name: Drew v. Ocwen Loan Servicing, LLC
Services Provided: Testifying expert, expert reports, depositions, trial testimony for plaintiff
Disposition: Plaintiff obtained statutory damages for willful TCPA violations
Date: 2015

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                       related to unlawful cellular telephone calls
Law Firm: Parisi & Havens LLP
Case Name: Kleja v. Transworld Systems, Inc.
Services Provided: Testifying expert, expert reports for plaintiff
Disposition: Settled
Date: 2015

Expert Engagement:
Type of Matter: California Invasion of Privacy Act (Penal Code §§ 630) class action related to
                       unlawful recording of telephone conversations
Law Firm: Keller Grover LLP and Law Offices of Scot D. Bernstein
Case Name: McCabe v. Six Continents Hotels, Inc.
Services Provided: Testifying expert, expert reports, depositions for plaintiff
Disposition: Settled
Date: 2015

Expert Engagement:
Type of Matter: Material Breach of Contract
Law Firm: Hogan Lovells USA LLP
Case Name: IBM de México Comercialización y Servicios, S. de R.L. de C.V. adverse
                       Iusacell, S.A. de C.V.
Services Provided: Testifying expert, expert reports for IBM México
Disposition: Ongoing
Date: 2014 – 2016

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 related to
                       unlawful cellular telephone calls
Law Firm: Lemberg & Associates LLC
Case Name: Hamlett et al v. Santander Consumer USA Inc. et al
Services Provided: Testifying expert, expert reports, depositions for plaintiff
Disposition: Settled
Date: 2014 – 2015

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                       related to unlawful cellular telephone calls

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<tr><td></td><td>Randall A. Snyder
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Law Firm:	Parisi & Havens LLP
Case Name:	Lofton v. Verizon Wireless LLC
Services Provided:	Testifying expert, expert reports for plaintiff
Disposition:	Settled
Date:	2014 – 2015

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to short message service (SMS) technology
Law Firm:	McGuire Law, P.C.
Case Name:	Spencer v. AT&T Digital Life, Inc.
Services Provided:	Testifying expert, expert reports, depositions for plaintiff
Disposition:	Settled
Date:	2014

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to unlawful cellular telephone calls
Law Firm:	McGuire Law, P.C.
Case Name:	Valladares v. Blackboard, Inc.
Services Provided:	Testifying expert for plaintiff
Disposition:	Ongoing
Date:	2014

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to short message service (SMS) technology
Law Firm:	Butsch Roberts & Associates, LLC
Case Name:	In re: Life Time Fitness, Inc.
Services Provided:	Consulting expert for plaintiff
Disposition:	Settled
Date:	2014

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to unlawful cellular telephone calls
Law Firm:	Morgan & Morgan, P.A.
Case Name:	Cauchon v. Whetstone Partners, LLC, d/b/a eTitleLoan
Services Provided:	Testifying expert, expert reports for plaintiff
Disposition:	Settled
Date:	2014

Expert Engagement:

Type of Matter:	Intellectual property (patents) related to short message service (SMS) technology
Law Firm:	McGuireWoods LLP
Case Name:	Comcast Cable Communications, LLC v. Sprint Communications Company L.P.
Services Provided:	Consulting expert for defendant

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Disposition: Ongoing
Date: 2014

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                    related to unlawful cellular telephone calls
Law Firm: Caddell & Chapman
Case Name: Hooker v. Sirius XM Radio, Inc.
Services Provided: Testifying expert for plaintiff
Disposition: Settled
Date: 2014 – 2016

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                    related to short message service (SMS) technology
Law Firm: Bock & Hatch, LLC
Case Name: Kozlow v. Hangtime, Inc.
Services Provided: Testifying expert, expert reports for plaintiff
Disposition: Settled
Date: 2014

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                    related to unlawful cellular telephone calls
Law Firm: Parisi & Havens LLP
Case Name: In re Collecto, Inc.
Services Provided: Testifying expert, expert reports for plaintiff
Disposition: Ongoing
Date: 2014

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                    related to unlawful cellular telephone calls
Law Firm: Edelson PC
Case Name: Birchmeier et al v. Caribbean Cruise Line, Inc. et al
Services Provided: Testifying expert, expert reports for plaintiff
Disposition: Settled
Date: 2014

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                    related to short message service (SMS) technology
Law Firm: Keogh Law, Ltd.
Case Name: Johnson v. Yahoo! Inc.
Services Provided: Testifying expert, expert reports, depositions for plaintiff
Disposition: Ongoing
Date: 2014

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Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to short message service (SMS) technology
Law Firm:	Jacobs Kolton, Chtd.
Case Name:	Nunes v. Twitter, Inc.
Services Provided:	Consulting expert for plaintiff
Disposition:	Ongoing
Date:	2014

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to unlawful cellular telephone calls
Law Firm:	Manning Law, PLLC
Case Name:	Manning v. Lendio, Inc.
Services Provided:	Testifying expert for plaintiff
Disposition:	Ongoing
Date:	2014

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to short message service (SMS) technology
Law Firm:	The Law Offices of Joseph R. Manning, Jr.
Case Name:	Vargem v. Tax Defense Partners, LLC
Services Provided:	Testifying expert for plaintiff
Disposition:	Ongoing
Date:	2014

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to unlawful cellular telephone calls
Law Firm:	Steptoe & Johnson PLLC
Case Name:	Cain v. Monitronics, International, Inc.
Services Provided:	Consulting expert for defendant
Disposition:	Ongoing
Date:	2014

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to short message service (SMS) technology and unlawful cellular telephone calls
Law Firm:	Mantese Honigman Rossman and Williamson, P.C.
Case Name:	Glassbrook v. Rose Acceptance, Inc. and First National Bank of America
Services Provided:	Testifying expert, expert reports, depositions for plaintiff
Disposition:	Ongoing
Date:	2014

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Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to unlawful cellular telephone calls
Law Firm:	Kazerouni Law Group, APC
Case Name:	Iniguez v. The CBE Group, Inc.
Services Provided:	Testifying expert, expert reports for plaintiff
Disposition:	Settled
Date:	2014

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to unlawful cellular telephone calls
Law Firm:	Keogh, Cox & Wilson, Ltd.
Case Name:	Hetherington v. Omaha Steaks, Inc. and Omaha Steaks International, Inc.
Services Provided:	Testifying expert, expert reports for plaintiff
Disposition:	Settled
Date:	2014

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to unlawful cellular telephone calls
Law Firm:	Potter Handy, LLP
Case Name:	Potter v. Bank of America Corporation
Services Provided:	Testifying expert, expert reports for plaintiff
Disposition:	Settled
Date:	2014

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to short message service (SMS) technology
Law Firm:	Lemberg & Associates LLC
Case Name:	Shiyan v. Lucille Roberts Health Clubs, Inc.
Services Provided:	Testifying expert, expert reports for plaintiff
Disposition:	Withdrawn
Date:	2014

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to unlawful cellular telephone calls
Law Firm:	Lemberg & Associates LLC
Case Name:	Meyer v. Receivables Performance Management LLC
Services Provided:	Testifying expert for plaintiff
Disposition:	Settled
Date:	2014

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action

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related to unlawful cellular telephone calls
Law Firm: McGuire Law, P.C.
Case Name: Murray v. Bill Me Later, Inc.
Services Provided: Consulting expert for plaintiff
Disposition: Settled
Date: 2014

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                       related to unlawful cellular telephone calls
Law Firm: Lemberg & Associates LLC
Case Name: Creel v. GC Services, L.P.
Services Provided: Testifying expert, expert reports, depositions for plaintiff
Disposition: Settled
Date: 2014

Expert Engagement:
Type of Matter: Intellectual property (patents) related to short message service (SMS) technology
                       and communication protocols
Law Firm: White & Case LLP
Case Name: Nokia Corporation v. Google Inc.
Services Provided: Testifying expert for defendant
Disposition: Settled
Date: 2014

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                       related to short message service (SMS) technology
Law Firm: McGuire Law, P.C.
Case Name: Gomez v. Campbell-Ewald Company
Services Provided: Consulting expert for plaintiff
Disposition: Ongoing
Date: 2014

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                       related to short message service (SMS) technology
Law Firm: Francis & Mailman, P.C.
Case Name: Dominguez v. Yahoo! Inc.
Services Provided: Testifying expert, expert reports, depositions for plaintiff
Disposition: Ongoing
Date: 2013 – 2016

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                       related to short message service (SMS) technology
Law Firm: McGuire Law, P.C.

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Case Name:	Smith v. Microsoft Corporation
Services Provided:	Testifying expert, expert reports for plaintiff
Disposition:	Ongoing
Date:	2013 – 2016

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to unlawful cellular telephone calls
Law Firm:	Lemberg & Associates LLC
Case Name:	Horton v. Cavalry Portfolio Services LLC
Services Provided:	Testifying expert, expert reports, depositions for plaintiff
Disposition:	Ongoing
Date:	2013 – 2014

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to short message service (SMS) technology
Law Firm:	Law Office of Scott D. Owens, Esq. and Farmer, Jaffee, Weissing, Edwards, Fistos & Lehrman, P.L.
Case Name:	Legg v. Voice Media Group, Inc.
Services Provided:	Testifying expert, expert reports for plaintiff
Disposition:	Dismissed
Date:	2013 – 2014

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to short message service (SMS) technology
Law Firm:	Edelson LLC
Case Name:	Sterk v. Path, Inc.
Services Provided:	Testifying expert, expert reports for plaintiff
Disposition:	Settled
Date:	2013 – 2014

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to short message service (SMS) technology
Law Firm:	Heyrich Kalish McGuigan, PLLC
Case Name:	Gragg v. Orange Cab Company, Inc. et al
Services Provided:	Testifying expert, expert reports, depositions for plaintiff
Disposition:	Dismissed
Date:	2013 – 2015

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to short message service (SMS) technology
Law Firm:	Wooten, Kimbrough & Normand, PA
Case Name:	Murphy v. DCI Biologicals, LLC

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Services Provided: Testifying expert, expert reports for plaintiff
Disposition: Settled
Date: 2013 – 2014

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to short message service (SMS) technology
Law Firm: Kazerouni Law Group, APC
Case Name: Sherman v. Yahoo! Inc.
Services Provided: Testifying expert, expert reports for plaintiff
Disposition: Dismissed
Date: 2013 – 2014

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 and Fair Debt Collection Practices Act (FDCPA) 15 U.S.C. 15 § 1692 related to unlawful cellular telephone calls
Law Firm: Collins & Story, PA
Case Name: Keen v. Delta Outsource Group, Inc.
Services Provided: Testifying expert, expert reports, depositions for plaintiff
Disposition: Settled
Date: 2013 – 2014

Expert Engagement:
Type of Matter: Intellectual property (patents) related to short message service (SMS) technology and mobile banking
Law Firm: Panovia Group LLP
Case Name: N5 Technologies, LLC v. Capital One, N.A. et al
Services Provided: Testifying expert, expert reports, depositions for plaintiff
Disposition: Settled
Date: 2013 – 2014

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 and California's Unfair Competition Law, Cal. Bus. & Prof. Code § 17200 class action related to short message service (SMS) technology
Law Firm: Hartmann and Kananen
Case Name: Baird v. Sabre, Inc.
Services Provided: Testifying expert, expert reports for plaintiff
Disposition: Dismissed
Date: 2013 – 2014

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to short message service (SMS) technology and unlawful charging of cellular telephone customers
Law Firm: Edelson LLC

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Case Name: Lee v. Stonebridge Life Insurance Company
Services Provided: Testifying expert, expert reports, depositions for plaintiff
Disposition: Settled
Date: 2012 – 2014

Expert Engagement:
Type of Matter: Intellectual property (patents) related to short message service (SMS) technology
                      and multimedia message service (MMS) technology
Law Firm: Baker Botts LLP
Case Name: Intellectual Ventures LLC v. AT&T Mobility LLC, T-Mobile USA, Inc., Sprint
                      Spectrum L.P., US Cellular Corporation
Services Provided: Testifying expert, expert reports for defendants
Disposition: Patent withdrawn from litigation
Date: 2012 – 2014

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                      related to short message service (SMS) technology
Law Firm: Keogh Law, Ltd.
Case Name: Wanca v. LA Fitness International, LLC
Services Provided: Testifying expert, expert reports, depositions for plaintiff
Disposition: Settled
Date: 2013

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                      related to unlawful cellular telephone calls
Law Firm: Lemberg & Associates LLC
Case Name: Penn v. NRA Group, LLC
Services Provided: Consulting expert for plaintiff
Disposition: Ongoing
Date: 2013

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                      related to unlawful cellular telephone calls
Law Firm: Lemberg & Associates LLC
Case Name: Reed v. GC Services LP
Services Provided: Consulting expert for plaintiff
Disposition: Settled
Date: 2013

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                      related to short message service (SMS) technology
Law Firm: The Lavery Law Firm
Case Name: Volpe v. Caribbean Cruise Line, Inc.

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Services Provided: Consulting expert for plaintiff
Disposition: Dismissed
Date: 2013

Expert Engagement:
Type of Matter: Washington Consumer Protection Act, RCW 19.86 and RCW 80.36.400 related
                      to unfair business practices and unlawful cellular telephone calls
Law Firm: Williamson and Williams Law
Case Name: Kids Northwest v. First Data Corporation
Services Provided: Consulting expert for plaintiff
Disposition: Ongoing
Date: 2013

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                      related to short message service (SMS) technology
Law Firm: George Rikos Law
Case Name: Van Patten v. Vertical Fitness
Services Provided: Testifying expert, expert reports for plaintiff
Disposition: Ongoing
Date: 2013

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 and California
                      Business and Professions Code § 17200 class action related to short message
                      service (SMS) technology
Law Firm: Milberg LLP
Case Name: D'Agostino v. Jesta Digital, LLC (dba Jamster)
Services Provided: Testifying expert, expert reports for plaintiff
Disposition: Settled
Date: 2013

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 and Restrictions
                      on Telemarketing, Telephone Solicitation, and Facsimile Advertising 47 C.F.R.
                      § 64.1200(d)(3) class action related to unlawful cellular telephone calls
Law Firm: Burke Law Offices, LLC
Case Name: Benzion v. Vivint, Inc.
Services Provided: Testifying expert, expert reports, depositions for plaintiff
Disposition: Settled
Date: 2013

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                      related to unlawful cellular telephone calls
Law Firm: Lemberg & Associates LLC
Case Name: Rutigliano v. Convergent Outsourcing, Inc.

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Curriculum Vitae

Services Provided: Testifying expert, expert reports for plaintiff
Disposition: Ongoing
Date: 2013

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                       related to short message service (SMS) technology
Law Firm: Kazerouni Law Group, APC
Case Name: Emanuel v. The Los Angeles Lakers, Inc.
Services Provided: Testifying expert, expert reports for plaintiff
Disposition: Dismissed
Date: 2013

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                       related to short message service (SMS) technology
Law Firm: Kazerouni Law Group, APC
Case Name: Barani v. Wells Fargo Bank, N.A.
Services Provided: Consulting expert for plaintiff
Disposition: Settled
Date: 2013

Expert Engagement:
Type of Matter: Intellectual property (patents) related to wireless calling party identification
                       technology
Law Firm: K&L Gates LLP
Case Name: Cequint Inc. v. Apple Inc.
Services Provided: Consulting expert for plaintiff
Disposition: Settled
Date: 2013

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                       related to unlawful cellular telephone calls
Law Firm: Donald A. Yarbrough, Esq.
Case Name: Mais v. Gulf Coast Collection Bureau, Inc.
Services Provided: Testifying expert, expert reports for plaintiff
Disposition: Dismissed on appeal
Date: 2013

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                       related to unlawful cellular telephone calls
Law Firm: Donald A. Yarbrough, Esq.
Case Name: Manno v. Healthcare Revenue Recovery Group, LLC
Services Provided: Testifying expert, expert reports, depositions for plaintiff
Disposition: Settled

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Curriculum Vitae

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Date: 2013

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                             related to short message service (SMS) technology and unlawful charging of
                             cellular telephone customers
Law Firm: Law Office of Scott D. Owens, Esq.
Case Name: Wojcik v. Buffalo Bills, Inc.
Services Provided: Testifying expert, expert reports for plaintiff
Disposition: Settled
Date: 2012 – 2013

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                             related to short message service (SMS) technology and unlawful charging of
                             cellular telephone customers
Law Firm: Law Office of Scott D. Owens, Esq.
Case Name: Keim v. ADF Midatlantic, LLC (Pizza Hut)
Services Provided: Testifying expert for plaintiff
Disposition: Ongoing
Date: 2012 – 2013

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                             related to unlawful cellular telephone calls
Law Firm: Liner Grode Stein Yankelevitz Sunshine Regenstreif & Taylor LLP
Case Name: Connelly v. Hilton Grand Vacations Company, LLC
Services Provided: Testifying expert, expert reports, depositions for defendant
Disposition: Dismissed
Date: 2012 – 2013

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                             related to short message service (SMS) technology
Law Firm: Kirby Law Group
Case Name: Agne v. Papa John's International, Inc. et al
Services Provided: Consulting expert for plaintiff
Disposition: Settled
Date: 2012

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action and
                             NY GBL 399-P class action related to unlawful calls
Law Firm: Bellin and Associates LLC
Case Name: Tipoo v. Enhanced Recovery Company, LLC
Services Provided: Testifying expert, discovery motions for plaintiff
Disposition: Undisclosed

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Curriculum Vitae

Date: 2012

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                                related to unlawful calls
Law Firm: Burke Law Offices, LLC
Case Name: Bailey v. Household Finance Corporation et al
Services Provided: Testifying expert, expert reports for plaintiff
Disposition: Undisclosed
Date: 2011 – 2012

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                                related to short message service (SMS) technology
Law Firm: Burke Law Offices, LLC
Case Name: Annoni v. FYISMS.com, LLC
Services Provided: Testifying expert, expert reports for plaintiff
Disposition: Undisclosed
Date: 2011 – 2012

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                                related to short message service (SMS) technology and unlawful charging of
                                cellular telephone customers
Law Firm: KamberEdelson, LLC
Case Name: Schrock v. Wenner Media LLC
Services Provided: Consulting expert for plaintiff
Disposition: Undisclosed
Date: 2011

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                                related to short message service (SMS) technology and unlawful charging of
                                cellular telephone customers
Law Firm: Summit Law Group
Case Name: Kramer v. Autobytel, Inc. and B2Mobile, LLC
Services Provided: Consulting expert for defendant
Disposition: Settled
Date: 2011

Expert Engagement:
Type of Matter: Intellectual property (patents) related to wireless location based services (LBS)
Law Firm: Mintz, Levin, Cohn, Ferris, Glovsky and Popeo PC
Case Name: Emsat Geolocation Technology, LLC v. CellCo Limited Partnership (dba
                                Verizon Wireless) et al
Services Provided: Testifying expert, USPTO affidavits for patent reexamination for plaintiff
Disposition: Undisclosed

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Date: 2010 – 2011

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                         related to unlawful calls
Law Firm: Keogh Law, Ltd.
Case Name: Griffith v. Consumer Portfolio Services, Inc.
Services Provided: Testifying expert, expert reports for plaintiff
Disposition: Undisclosed
Date: 2010 – 2011

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                         related to unlawful calls
Law Firm: Keogh Law, Ltd.
Case Name: Dobbin v. Wells Fargo Auto Finance, Inc.
Services Provided: Testifying expert, expert reports for plaintiff
Disposition: Dismissed
Date: 2010 – 2011

Expert Engagement:
Type of Matter: Intellectual property (patents) related to short message service (SMS) technology
Law Firm: Nelson Bumgardner Casto PC
Case Name: Celltrace LLC v. AT&T Inc. et al
Services Provided: Consulting expert for plaintiff
Disposition: Undisclosed
Date: 2010

Expert Engagement:
Type of Matter: California Constitution, Article VI, § 10, class action related to short message
                         service (SMS) technology and unlawful charging of cellular telephone customers
Law Firm: KamberEdelson, LLC
Case Name: VanDyke v. Media Breakaway, LLC
Services Provided: Testifying expert, expert reports for plaintiff
Disposition: Settled
Date: 2009

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action
                         related to unlawful calls
Law Firm: Gordon & Rees LLP
Case Name: Allen v. Rickenbacker Collection Services
Services Provided: Consulting expert for defendant
Disposition: Undisclosed
Date: 2009
Expert Engagement:
Type of Matter: Intellectual property (trademarks) related to short message service (SMS)

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technology

Law Firm:	Fish & Richardson P.C.
Case Name:	Cricket Communications, Inc. v. HipCricket, Inc.
Services Provided:	Testifying expert, expert reports, depositions for plaintiff
Disposition:	Undisclosed
Date:	2008 – 2009

Expert Engagement:

Type of Matter:	California Constitution, Article VI, § 10, class action related to short message service (SMS) technology and unlawful charging of cellular telephone customers
Law Firm:	KamberEdelson, LLC
Case Name:	Albrecht v. mBlox, Inc. et al
Services Provided:	Testifying expert, expert reports for plaintiff
Disposition:	Settled
Date:	2008 – 2009

Expert Engagement:

Type of Matter:	Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227 class action related to short message service (SMS) technology
Law Firm:	Blim & Edelson, LLC
Case Name:	Satterfield v. Simon & Schuster, Inc.
Services Provided:	Testifying expert, expert reports for plaintiff
Disposition:	Settled
Date:	2007 – 2009

Expert Engagement:

Type of Matter:	Class action related to short message service (SMS) technology and unlawful charging of cellular telephone customers
Law Firm:	KamberEdelson, LLC
Case Name:	Walker v. Motricity, Inc.
Services Provided:	Testifying expert, expert reports, depositions for plaintiff
Disposition:	Settled
Date:	2008

Expert Engagement:

Type of Matter:	Class action related to short message service (SMS) technology and unlawful charging of cellular telephone customers
Law Firm:	KamberEdelson, LLC
Case Name:	Rynearson v. Motricity, Inc.
Services Provided:	Testifying expert, expert reports, depositions for plaintiff
Disposition:	Settled
Date:	2008

Expert Engagement:

Type of Matter:	California Constitution, Article VI, § 10, class action related to short message service (SMS) technology and unlawful charging of cellular telephone customers
Law Firm:	KamberEdelson, LLC

Randall A. Snyder
Curriculum Vitae

Case Name: Reed v. Sprint Nextel Corporation
Services Provided: Testifying expert, expert reports for plaintiff
Disposition: Settled
Date: 2008

Expert Engagement:
Type of Matter: Class action related to short message service (SMS) technology and unlawful charging of cellular telephone customers
Law Firm: KamberEdelson, LLC
Case Name: Paluzzi v. CellCo Limited Partnership (dba Verizon Wireless) and mBlox. Inc.
Services Provided: Consulting expert for plaintiff
Disposition: Settled
Date: 2008

Expert Engagement:
Type of Matter: Class action related to short message service (SMS) technology and unlawful charging of cellular telephone customers
Law Firm: KamberEdelson, LLC
Case Name: Nava v. Predicto Mobile, LLC
Services Provided: Consulting expert for plaintiff
Disposition: Settled
Date: 2008

Expert Engagement:
Type of Matter: Class action related to short message service (SMS) technology and unlawful charging of cellular telephone customers
Law Firm: KamberEdelson, LLC
Case Name: McFerren v. AT&T Mobility, LLC
Services Provided: Consulting expert for plaintiff
Disposition: Settled
Date: 2008

Expert Engagement:
Type of Matter: California's Unfair Competition Law, Cal. Bus. & Prof. Code § 17200 class action related to short message service (SMS) technology and unlawful charging of cellular telephone customers
Law Firm: KamberEdelson, LLC
Case Name: Guerrero v. MobileFunster, Inc.
Services Provided: Consulting expert for plaintiff
Disposition: Settled
Date: 2008

Expert Engagement:
Type of Matter: Computer Fraud and Abuse Act, 18 U.S.C. Article § 1030, class action related to short message service (SMS) technology and unlawful charging of cellular telephone customers
Law Firm: KamberEdelson, LLC

Randall A. Snyder
Curriculum Vitae

Case Name: Gray v. Mobile Messenger Americas, Inc.
Services Provided: Consulting expert for plaintiff
Disposition: Settled
Date: 2008

Expert Engagement:
Type of Matter: Class action related to short message service (SMS) technology and unlawful charging of cellular telephone customers
Law Firm: KamberEdelson, LLC
Case Name: Goddard v. Google, Inc.
Services Provided: Consulting expert for plaintiff
Disposition: Settled
Date: 2008

Expert Engagement:
Type of Matter: Class action related to short message service (SMS) technology and unlawful charging of cellular telephone customers
Law Firm: KamberEdelson, LLC
Case Name: Duffy v. Nevis Mobile, LLC
Services Provided: Consulting expert for plaintiff
Disposition: Settled
Date: 2008

Expert Engagement:
Type of Matter: Class action related to short message service (SMS) technology and unlawful charging of cellular telephone customers
Law Firm: KamberEdelson, LLC
Case Name: Criswell v. MySpace, Inc.
Services Provided: Testifying expert, expert reports for plaintiff
Disposition: Undisclosed
Date: 2008

Expert Engagement:
Type of Matter: Class Action Fairness Act of 2005, 28 U.S.C. §§ 1332, 1453 and 28 U.S.C. § 1367(a) class action related to short message service (SMS) technology and unlawful charging of cellular telephone customers
Law Firm: KamberEdelson, LLC
Case Name: Bradberry v. mBlox, Inc.
Services Provided: Consulting expert for plaintiff
Disposition: Settled
Date: 2008

Expert Engagement:
Type of Matter: California Constitution, Article VI, § 10, class action related to short message service (SMS) technology and unlawful charging of cellular telephone customers
Law Firm: KamberEdelson, LLC
Case Name: Ayers v. Media Breakaway, LLC

<div align="center">

Randall A. Snyder
Curriculum Vitae

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Services Provided: Testifying expert, expert reports for plaintiff
Disposition: Settled
Date: 2008

Expert Engagement:
Type of Matter: Intellectual property (patents) related to wireless location based services (LBS)
Law Firm: Hahn Loeser & Parks, LLC
Case Name: Emsat Geolocation Technology, LLC v. CellCo Limited Partnership (dba Verizon Wireless) et al
Services Provided: Consulting expert for plaintiff
Disposition: Undisclosed
Date: 2008

Expert Engagement:
Type of Matter: Class action related to short message service (SMS) technology and unlawful charging of cellular telephone customers
Law Firm: Blim & Edelson, LLC
Case Name: Valdez v. Sprint Nextel Corporation
Services Provided: Consulting expert for plaintiff
Disposition: Settled
Date: 2007

Expert Engagement:
Type of Matter: Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 201 class action related to short message service (SMS) technology and unlawful charging of cellular telephone customers
Law Firm: Blim & Edelson, LLC
Case Name: Bradberry v. T-Mobile USA, Inc.
Services Provided: Testifying expert, expert reports for plaintiff
Disposition: Settled
Date: 2007

Expert Engagement:
Type of Matter: California Computer Crime Law, Cal. Pen. Code § 502 and California's Unfair Competition Law, Cal. Bus. & Prof. Code § 17200 class action related to short message service (SMS) technology
Law Firm: KamberEdelson, LLC
Case Name: Abrams v. Facebook, Inc.
Services Provided: Testifying expert, expert reports for plaintiff
Disposition: Settled
Date: 2007

Expert Engagement:
Type of Matter: Intellectual property (patents) related to short message service (SMS) technology
Law Firm: Paul Hastings LLP
Case Name: TeleCommunication Systems, Inc. v. Mobile365, Inc.
Services Provided: Testifying expert, expert reports, depositions, trial testimony for defendant

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┌────────────────────────────────────┐
│         Randall A. Snyder           │
│         Curriculum Vitae            │
└────────────────────────────────────┘
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Disposition: Settled
Date: 2007

Wireless
Research
Services

Wireless Research Services, LLC

2015 Rate Sheet

ITEM	FEE
Non-refundable Retainer at Time of Engagement	$5,000
Expert Witness Consulting, Expert Reports	$450 per hour
Depositions, In-court Testimony	$500 per hour
Required Travel, Lodging, Board and Administrative Expenses	$1,000 per airline travel day plus actual incurred expenses
Invoicing	Payment due upon receipt
Penalty for Late Payments	10% of total invoice added after each 30 days late until full payment is received

By signing below and returning an executed copy to Wireless Research Services, LLC along with payment of the non-refundable retainer, you agree to the payment terms contained on this rate sheet.

Agreed to by:_____

Law firm/Company:_____

Case Name:_____

Date:_____

EXHIBIT B

8.   Documents evidencing and/or reflecting internal memoranda, bulletins, committee or team reports, emails, meeting minutes, or other documents created or modified by Defendant during the four (4) year period preceding the filing of the instant lawsuit regarding TCPA compliance in connection with Defendant's debt collection efforts.

Response: Defendant objects to producing any internal memoranda, bulletins, committee or team reports, emails, meeting minutes or other documents requested in that the same have no bearing on the subject claims. Defendant reserves the right to supplement this response as more information becomes available.

9.   Documents describing and/or reflecting your audio recording procedures for incoming and outgoing calls.

Response: For the time period which is at issue in this suit, KFCU did not employ an audio recording procedure for all incoming and outgoing calls. Sometime in late 2014 or early 2015, KFCU made certain system upgrades and implemented two (2) new systems including IC Business Manager and Interaction Client, which allows for the recording of incoming and outgoing calls, and further allows for the making of various collection notes and storage of certain related information. Prior thereto, KFCU utilized the Symitar system, which allowed for notations to be made on collection matters, and various other functions for KFCU.

10.   Documents describing and/or reflecting your procedures for monitoring calls.

Response: For the time period which is at issue in this suit, KFCU did not employ an audio recording procedure for all incoming and outgoing calls. Sometime in late 2014 or early 2015, KFCU made certain system upgrades and implemented two (2) new systems

7

EXHIBIT C

as the same are or may be protected by the Fair Credit Reporting Act of 1970 ("FCRA"),

Gramm-Leach-Bliley Act ("GLBA)", and Right to Financial Privacy Act ("RFPA"), among

other various federal laws. In order to produce any such documents, Defendant must be

provided with an executed waiver and authorization to release the same from the duly

authorized representative of Bobbie Holland and Claude Holland. As Plaintiff is also aware

the Plaintiff has a separate loan with KFCU which is unrelated to the instant loan made by

KFCU to Claude Holland and Bobbie Holland, and KFCU also contacted the Plaintiff by

telephone regarding said loan. Defendant reserves the right to supplement this response as

more information becomes available.

5.   Identify the manufacturer name, make, model, software name and software version of the

dialing system that was used by KEESLER FEDERAL CREDIT UNION to place telephone calls

to Plaintiff's aforementioned cellular telephone number during the "relevant time period."

ANSWER: Defendant objects that this Interrogatory is vague. Without waiving the

same, Defendant would state that it does not possess, use, or otherwise employ, through itself

or third parties, any automated "dialing system". Defendant has an existing phone system,

where it manually inputs numbers to make telephone calls. Defendant currently has an

additional recording system which records phone calls with customers, but the recording

system was not in place during the time period when Plaintiff had telephone conversations

with the Defendant on the loan at issue originally made to Claude Holland and Bobbie

Holland. Defendant uses CISCO Systems phones to make phone calls. The current phones

used in the collection department include "Model Cisco IP Phone 7900 Series". In addition,

said phones are currently used in connection with the IC Business Manager software and

Interaction Client software, which allows for the recording of incoming and outgoing calls, and further allows for the making of various collection notes and storage of information. Prior thereto, KFCU utilized the Symitar system in addition to the Model Cisco IP Phone 7900 Series. Defendant reserves the right to supplement this response as more information becomes available.

6.   If Defendant contends that the calls it placed to Plaintiff's cellular telephone number, (228) 343-1833, were manually dialed, please state all facts which support this contention, including by describing in detail the process utilized by Defendant's representatives for manually dialing phone calls, and identifying the specific equipment utilized by Defendant for manually dialing phone calls.

ANSWER: Defendant objects that this Interrogatory contains multiple sub-parts in violation of the Rules of Federal Procedure. Without waiving same, Defendant would further state that Defendant's employees utilized only lawful means of communication, which included using manually dialed telephones provided by KFCU to contact customers. To manually dial numbers employees of the Defendant use their fingers and touch keys on the phone they are using. Defendant reserves the right to supplement this response as more information becomes available.

7.   If Defendant contends that the calls it placed to Plaintiff's cellular telephone number, (228) 343-1833, were made with the prior express consent of the Plaintiff, please state all facts that support this contention, and identify all documents reflecting and/or evidencing the alleged prior express consent given by Plaintiff.

ANSWER: Defendant objects that this Interrogatory asks for a legal conclusion, and/or is ambiguous as to "prior express consent." Without waiving the same, Defendant

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EXHIBIT D

Cisco IP Phone Portfolio

| Introduction | Cisco IP Phones 6900 Series | Cisco IP Phones 7900 Series | IP Endpoint Multimedia Applications | Summary |
| Cisco SIP Phones 3900 Series | Cisco IP Phone 7800 Series | Cisco IP Phones 8800 Series | Analog Telephone Adaptor & Accessories | Additional Information |

Contents

CISCO

CISCO

Introduction	Cisco IP Phones 6900 Series	Cisco IP Phones 7900 Series	IP Endpoint Multimedia Applications	Summary
Cisco SIP Phones 3900 Series	Cisco IP Phone 7800 Series	Cisco IP Phones 8800 Series	Analog Telephone Adaptor & Accessories	Additional Information

Contents | ◀ | ‹ | 18

7900 Series

Figure 11. Large Display Screens, Rich Graphics, More Information

IP Phone 7900 Series

➕ Enlarge ⬛ Reduce

General Business VoIP Communications

Cisco Unified IP Phones 7900 Series

If your business requires business-grade voice communications, access to color displays and Gigabit Ethernet on select models, ruggedized voice-centric handsets for wireless LAN networks, and support for third-party endpoint XML-based applications, the Cisco IP Phone 7900 Series address these needs. The 7900 Series supports knowledge workers, administrative staff, managers, and executives with general business VoIP communication needs at the desk. Select models support actively mobile workers in more rigorous work roles with ruggedized voice communications.

The Cisco IP Phones 7900 Series (Figure 11) deliver these capabilities and enhance productivity with support for multiple call-per-line appearance on select models. With multiple-call-per-line appearance, you can take advantage of more sophisticated call navigation capabilities with support for multiple call sessions on a per-line basis. As a simple example, on a 2-line endpoint, you could be on an active call and navigate to pick up a second incoming call on the same line, while the first call is automatically placed on hold. You can then switch back and forth between these two call sessions as required. This capability offers your organization sophisticated and powerful communication options that are not typically available from traditional telephony or hybrid systems.

Businesses that integrate custom and ready-to-use IP endpoint applications into their IP phones can:

- Reduce operating and administration costs.

- Increase revenue.

- Improve employee productivity.

- Enhance customer satisfaction and loyalty.

- Transform business processes.

CISCO

Introduction	Cisco IP Phones 6900 Series	Cisco IP Phones 7900 Series	IP Endpoint Multimedia Applications	Summary
Cisco SIP Phones 3900 Series	Cisco IP Phone 7800 Series	Cisco IP Phones 8800 Series	Analog Telephone Adaptor & Accessories	Additional Information

Contents ◀ ‹ 19

7900 Series

Figure 12. High-Definition Audio, Rich Display Experience, High-Speed Connectivity

➕ Enlarge ➖ Reduce

IP Phone 7945G, 7965G, and 7975G

General Business Voice-focused Endpoints

Cisco IP Phone 7945G, 7965G, and 7975 Endpoints

These endpoints (Figure 12) come standard with speakerphones and handsets to support wideband audio. An expanded application suite includes support for XML text and graphical applications. All support Gigabit Ethernet-integrated switches to reduce cabling at the desktop and installation costs. The 7945, 7965, and 7975 support backlit color displays.

The Cisco IP Phone 7945G includes the following capabilities:

· Two programmable backlit line/feature keys for quick access to communications

· A 5-inch (12.7 cm), backlit, high-resolution, 320- x 240-pixel graphical color display

· Wideband audio support on headset, handset, and full-duplex speakerphone

· Integrated IEEE 10/100/1000 switch ports, which support the switching of multimedia traffic from a co-located PC

· Four-way navigation cluster plus a select key, which allow you to scroll vertically and horizontally when navigating menus and directories

The Cisco IP Phone 7965G includes the following capabilities:

· Six programmable backlit line/feature keys for quick access to communications

· A 5-inch (12.7 cm), backlit, high-resolution, 320- x 240-pixel graphical color display

· Wideband audio support for headset, handset, and full-duplex speakerphone

· Integrated IEEE 10/100/1000 switch to support switching of traffic from a co-located PC

· Four-way navigation cluster plus a select key, which allow you to scroll vertically and horizontally when navigating menus and directories

EXHIBIT E

Interaction Desktop client

Printable Help

Interactive Intelligence Customer Interaction Center® (CIC)

2016 R2

Last updated January 11, 2016

Abstract

This document is a printable version of the Interaction Desktop client online help. It explains how to use Interaction Desktop client. Online help is available within Interaction Desktop by selecting *Getting Started* or *CIC Client* from the Help menu.

Interaction Desktop Client

Interaction Desktop Help

Important: Customer Interaction Center (CIC) supports several interaction management client applications. This documentation uses the term "CIC client" to refer to these applications, which include Interaction Connect, Interaction Desktop, and Interaction Client Web Edition. CIC client also refers to the Interactive Intelligence Oracle Service Cloud Integration. The full product name appears at the top of each help topic. The full product name may also be used in a help topic when necessary to distinguish between CIC clients.

Welcome to CIC client, a powerful interaction management application for desktop or laptop PCs. The CIC client offers more functionality than your telephone. Use it to manage your electronic communications, including phone calls, voice mail, conference calls, ACD routed email messages, and web chats.

For more information about some of the most frequently used CIC client features, see:

- Set Your Status
- Answer an Incoming Interaction
- Place a call to a number inside or outside your organization
- Forward calls to remote telephone numbers
- Transfer a call to another person
- Transfer a call to your voice mail
- Make conference calls
- Change the sound of your incoming calls

Note: The CIC client lets you log on to only one station at a time for security reasons. If you log on to a different station, the system drops the original station connection. You receive a message at the original station stating "Your connection has been dropped due to a subsequent logon to a different station". You can run multiple instances of CIC client on the same machine using different user credentials and the same station.

Need Help?

Click **Help > Getting Started** to display help for the framework. This includes help for creating and configuring workspaces and views.

Click **Help > CIC client** to display help for CIC client features and views.

Note: A printable version of the CIC client help is available on the Interactive Intelligence website at http://help.inin.com/cic/desktop/Printable_Documentation.htm.

Using the Search Feature

You can search for specific terms in both the HTML and the Web Help versions of the help. There is a basic search and an advanced search available from the Search tab.

A basic search is simple: just type whatever single word or phrase you want to search, press **Enter** or click the **List Topics** button (HTML version only). A list of topics containing that word or phrase appears. When searching for a phrase, use quotation marks to enclose the phrase. For example, use "directory toolbar" to return only topics that contain that exact phrase.

Some basic facts

- All the words you enter in the search box are used in the query.

- The search is always case-insensitive. A search for [dtmf] is the same as a search for [DTMF].

- Generally, punctuation is ignored, including @#$%^ & ()=+[]\ and other special characters.

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Interaction Desktop client Printable Help - 2016 R2

Related Topics

> Provisioning Wizard
> SIP Hard Phone
> SIP PC Audio
> SIP Soft Phone
> USB Audio Device

SIP Soft Phone Provisioning Wizard

If your network can be automatically discovered using DHCP option 160, your computer has only one network interface card, and your Full Computer Name matches the one used for an IP Phone in Interaction Administrator, then your SIP Soft Phone is automatically provisioned the first time you start it.

Otherwise, you must complete the provisioning process before you can make calls and use a SIP soft phone as a SIP endpoint. The SIP Soft Phone Provisioning Wizard simplifies this set-up process for a SIP Soft Phone.

Note: As a user, you can provision a SIP Soft Phone on any workstation to which you can log on. Customer Interaction Center then uses the correct configuration for the workstation you are currently using. A system administrator can provision any station using their CIC administrator credentials. The SIP Soft Phone Provisioning Wizard is available only if you installed the SIP Soft Phone application.

The SIP Soft Phone Provisioning Wizard guides you through the following tasks:

- Setting up Audio Devices

- Obtaining the Configuration File for your SIP Soft Phone

- Setting the Network Adapter Options

- Using Auto Provisioning to Configure your SIP Soft Phone

To start the SIP Soft Phone Provisioning Wizard:

- Right-click the SIP Soft Phone icon in the system tray, and then click **Provision**.

When the SIP Soft Phone Provisioning Wizard Welcome screen appears, click **Next**.

Note: Click the **Help** button in the SIP Soft Phone Provisioning Wizard for instructions on provisioning your SIP Soft Phone.

Related Topics

> **Audio Tuning Wizard**
> SIP Hard Phone
> SIP PC Audio
> SIP Soft Phone
> USB Audio Device

SIP Hard Phone

A SIP hard phone is a standalone device that is both a SIP device and an audio device. It can be used with or without the CIC client. Like a standalone analog phone, no additional configuration or added support is needed to work with the CIC client.

A list of supported SIP IP Phones is available at http://testlab.inin.com.

Related Topics

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EXHIBIT F

INTERACTIVE INTELLIGENCE®

Testlab

INin.COM	RESOURCES	ABOUT US	PARTNER WITH US	CONTACT US

SIP IP Phones - Details

Testlab Home

Hardware
- Aculab Cards
- Analog Gateways
- AudioCodes Cards
- Dialogic Cards
- Digital Gateways
- Interaction SIP Station I and II Headsets
- Mobile Devices
- PBX Integrations
- Servers
- Session Border Controllers
- SIP Carriers
- SIP IP Phones
- Switchover Hardware

Software
- ASR Engines
- Data & System Protection
- Database Servers
- Desktop Virtualization
- HMP Releases
- Mail Clients
- Mail Platforms
- Microsoft Patches
- TAPI Integrations
- TTS Engines
- Virtual Applications
- Web Browser
- Web Servers
- Windows OS

Save comparison to file

Features	Cisco 7905G	Cisco 7912G	Cisco 7940	Cisco 7960
Additional Information				
Initial Release	no	no	no	no
Authentication	yes	yes	yes	yes
Auto Answer	yes *This feature is controlled via CUCM and is effective for all calls or no calls. Cisco's SIP implementation lacks support for indicating per-call auto-answer using SIP NOTIFY messaging.	yes *This feature is controlled via CUCM and is effective for all calls or no calls. Cisco's SIP implementation lacks support for indicating per-call auto-answer using SIP NOTIFY messaging.	yes *This feature is controlled via CUCM and is effective for all calls or no calls. Cisco's SIP implementation lacks support for indicating per-call auto-answer using SIP NOTIFY messaging.	yes *This feature is controlled via CUCM and is effective for all calls or no calls. Cisco's SIP implementation lacks support for indicating per-call auto-answer using SIP NOTIFY messaging.
Blind Transfer	yes	yes	yes	yes
Call and Line Appearances				
Call Appearances per line	2	2	2	2
Line Appearances	1	1	2	6
Call Deflection				
Forward All	yes	yes	yes	yes
Forward Busy	no	no	no	no
Forward No Answer	no	no	no	no
Call Waiting	yes	yes	yes	yes
Can be used with Interaction Client	yes	yes	yes	yes
Codecs				
Additional Codecs	no	no	no	no
G.711alaw	yes	yes	yes	yes
G.711ulaw	yes	yes	yes	yes
G.722	no	no	no	no
G.723.1	no	no	no	no
G.726	no	no	no	no
G.729AB	yes	yes	yes	yes
GSM	no	no	no	no
RFC 3389 (VAD/CNG)	yes	yes	yes	yes

Color LCD Screen	no	no	no	no
Conference	yes	yes	yes	yes
Consult Transfer	yes	yes	yes	yes
Delayed Media	yes	yes	yes	yes
DHCP	yes	yes	yes	yes
Dial Plan Capabilities				
Dial Plan Routing	yes - proxy/emergency	yes - proxy/emergency	yes - proxy/emergency	yes - proxy/emergency
Dial Plan Termination	yes	yes	yes	yes
Do Not Disturb button	no	no	yes - Softkey	yes - Softkey
DTMF				
Inband	yes	yes	yes	yes
RFC 2833	yes	yes	yes	yes
Expansion Module(s) / Sidecar(s)	no	no	no	3
Headset Jack	no	no	yes	yes
Hold	yes	yes	yes	yes
Inline Power				
802.3af	no	yes	no	no
Cisco Inline Power	yes	yes	yes	yes
Interaction Center Integration				
Call Park	no	no	no	no
Group Pickup	no	no	no	no
Shared Line Appearances / BLA	no	no	no	no
Latency				
Always in	203 ms	203 ms	no	147 ms
Dynamic	96 ms	96 ms	no	63 ms
Missed Call Indication	yes	yes	yes	yes
Mute	yes	yes	yes	yes
MWI	yes	yes	yes	yes
NAT Support	yes	yes	yes	yes
Network Interface	10 Mb	10 Mb	10/100 FD	10/100 FD
Proxy Capabilities				
Backup Proxy	yes	yes	yes	yes
Outbound Proxy	yes	yes	yes	yes
RFC 3263	yes	yes	yes	yes
QoS				
DSCP	yes	yes	yes	yes
Re-Invite Support	yes	yes	yes	yes
Redial Button	yes - Softkey	yes - Softkey	yes - Softkey	yes - Softkey
Ringer Selection	no	no	yes	yes
RJ45 Jack for PC	no	yes	yes	yes
Signal / Audio				
SRTP	no	no	no	no
TCP	yes	no	no	no
TLS	no	no	no	no
UDP	yes	yes	yes	yes
Speakerphone	Half-duplex (monitor only)	Half-duplex (monitor only)	Full-duplex	Full-duplex
Speed Dial Buttons	0	0	1	5

Termination Character	#	#	#	#
TFTP/FTP configuration	yes - TFTP	yes - TFTP	yes - TFTP	yes - TFTP
Voicemail button	yes	yes	yes	yes
Volume Control	yes	yes	yes	yes
Web server Configuration	yes	yes	no	no

* Refer to the Install and Configuration doc for further information

INTERACTIVE INTELLIGENCE

SITE MAP

7601 Interactive Way
Indianapolis, Indiana 46278
USA
Call: +1 800.267.1364

Contact Center
Unified Communications
Business Process Automation

Resources
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Careers

Events
Buy
Portals

EXHIBIT G

adapt Communications at the Speed of Now

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About Us

When considering telecommunications, it's no longer a voice world.

Alternative, less costly forms of communication are emerging rapidly. How are you going to provide world-class customer service across an assortment of communication channels?

Unfortunately, there's no crystal ball and, no immediate answers to *which* form of communication your customers may elect to use this hour. This day. Any day. Will it be voice? Email? Web chat? Fax? Online forms? SMS?

Your goal is to build an **omnichannel** solution enabling world-class customer service no matter how any customer may choose to interact at any moment.

Can you do it? Do you have the right technology and processes in place to hit your service levels today and in the future?

Can you **Adapt?**

Since 1997, Adapt has helped hundreds of organizations ensure that they have a unified and simplified strategy aligned to meet the growing communication demands of the future.

Adapt is a highly honored North American reseller and systems integrator and delivers, develops, installs and supports omni-channel contact center communications.

Our product offering is the market-leading Interactive Intelligence *Customer Interaction Center®,* an IP communications software suite optimized by trained, certified professionals. They work every day to ensure the CIC platform is uniting your people and processes with your customers. The goal is delivering the same level of service to users regardless of the communication channel of choice. Applications are both **premise-** and **cloud**-based. Adapt also is widely known for delivering **contact center best practices**, **enterprise VoIP** and **business process automation** capabilities second to none.

Adapt has a 19-year history in the unified communication and contact center marketplace. Our company is headquartered in Oak Brook, Illinois. We serve clients in more than 25 states. Our teams specialize in sales, development, systems engineering and implementation, project management, technical product support, managed services and consulting. Our team members average a minimum 10 years of experience working with CIC.

Our 99 percent customer retention rate reflects our ability to satisfy customer needs and exceed expectations. Our success in serving clients, the awards and recognition we have earned for innovative applications of the CIC software and the depth of our engineering strength underscore how we help our customers unify, simplify and Adapt to an ever-changing telephony world.

EXHIBIT H

Heritage Federal Credit Union's Small Call Center Tackles Large Call Volume Challenges with Help From Adapt

"Now our agents interact with a member-focused, robust phone system integrated with our Episys core, allowing us flexibility, opportunity, more room for growth and a chance to make service enhancements."

Amanda Damm, IC Manager, Heritage Federal Credit Union

Newburgh, Indiana's **Heritage Federal Credit Union** (HFCU), formed in 1965 by ALCOA employees as Warrick Employees Federal Credit Union, serves more than 46,000 members and has more than $467 million in assets. Some 150 employees work out of three support offices and seven full-service branches. HFCU offers an array of loan products and also maintains an exclusive relationship with auto insurance carrier SWBC to market a lending product coined "MPOWER -The Best Auto Loan in the Market." Through it, members receive complimentary insurance services for an introductory period. Members are educated to the value of adding additional protection at below-market cost for a fully protected loan.

Solution:
Unified Communications through IP Communication Software Suite

Benefits:
Improved IVR produced a near six percent shrinkage in call volume in 2013

Automated greeting option now helps agents in cross-selling opportunities

Interaction Dialer regularly enables HFCU's collections team to better penetrate low-level delinquency accounts

Interaction Supervisor helps evaluate current/previous day performance allowing HFCU supervisors to manage in real time

HFCU's rapid growth was producing growing pains for its small but busy Information Center (IC). Nine full and part-time agents currently answer 12,000 calls per month from members. By late 2011, HFCU's existing phone system was at its end of life. Soaring call volume was adversely affecting overall phone system performance.

"Our phone system lacked the flexibility we needed," recalls Amanda Damm, IC manager who joined HFCU in early 2012. "We had little to no visibility into agent performance. There was no recording of calls. Often, a disputed call would come down to a member's word against an agent's memory."

The leadership team began searching for a unified communications system that would provide dialer capabilities, call recording, and easier real-time integration with HFCU's Symitar® Episys® information processor.

"Our team wanted our telecommunications platform to work in tandem with our core processor to capitalize on emerging opportunities for member growth and enhance our overall member services," Damm says.

HFCU considered an assortment of vendors and the variety of solutions each offered.

Several HFCU leaders had previous experience with Interactive Intelligence, makers of Customer Interaction Center™ (CIC), an all-in-one IP communications software suite used by thousands of organizations, including hundreds of financial institutions. CIC includes multiple applications -- IVR, ACD, reporting and more -- all running on a single platform. "In the end," Damm said, "our executive team concluded that most other vendors didn't offer extensive core integration capabilities."

HFCU also selected CIC's add-on predictive dialer application, Interaction Dialer®, and its add-on interaction recording, scoring, and quality monitoring application, Interaction Recorder®.

Chosen for custom application development, implementation, and support was Adapt Telephony Services, LLC, a prominent global reseller and systems integration partner for Interactive.

At HFCU, Interactive's Interaction Dialer is used primarily for early stage collection calls to delinquent HFCU members. Two campaigns are used.

In the first, an unattended message notifies members of their early-stage payment delinquency. It is delivered as a courtesy and reminds a member about a payment and restates the past due date.

The second dialer campaign is for demand dialing. It covers all levels of member payment delinquency. Once contact is established, the dialer connects the member with a live agent in Newburgh.

"Since we started using Interaction Dialer, the penetration of our low-level delinquency accounts has improved significantly," Damm says. "The overall productivity rate of agents has increased."

Additionally, the dialer can leave unattended messages that alert members when their account was compromised and to "be watching for a replacement card being mailed to you." HFCU also used the dialer to notify members how they can become ready for HFCU's conversion to online banking.

Interaction Recorder® is used to record calls for collections and in several back office departments whose staff members speak with members regularly. Damm cites the following four benefits of Interaction Recorder:

Quality and Employee Development – Supervisors can access the recordings and listen to calls for coaching purposes. Agents can listen to their calls, learn from mistakes, hear where improvements are needed, and thus improve with future calls.

Scorecard – Supervisors also work from an easy-to-set up, automated "scorecard." Automated reports reveal scores, give feedback, and note trends in quality performance. Damm adds that individual and group quality scores "are an important part of the performance metrics we report to the HFCU Board."

Research and Validation – Numerous, potentially sensitive member service situations have been resolved as a result of quickly locating recorded calls and being able to determine exactly what was said by the member and agent.

As an example, agents routinely answer payoff requests on vehicle loans from area car dealerships. Previously, agents weren't able to verify with 100% accuracy that the payoff amount the member *said* they were offered was the exact amount actually quoted by the agent. If the payment fell short, remaining balances were frequently written off as losses. This was because HFCU had no way of proving exactly what payoff amount was quoted on the phone.

"Now," Damm says, "we locate the call for verification, stand behind our service, and avoid a monetary loss. The recording reveals the correct payoff amount was given over the phone."

Training – New employee training has become more effective because supervisors can listen to live calls involving a long-time agent and allow the newly hired agent to silently observe and "role play." Once new agents begin taking calls, supervisors observe silently to ensure agents are providing the expected service level. Before Interaction Recorder®, new agents would sit side-by-side with a tenured agent, but learned only by hearing the agent side of conversations with members. The tenured agent was forced to stop after each call and take time to recap what was said by the member.

The Results

"We needed to update our phone system, get more flexibility within the IVR, and create a call-recording capability," Damm says.

"Now our agents interact with a member-focused, robust phone system integrated with our Episys core, allowing us flexibility, opportunity, more room for growth, and a chance to make service enhancements."

Overall improvements include the following:

Quality – Interaction Recorder has enabled HFCU to improve numerous aspects of member service, particularly loan payoff amount verification.

Collections – Interaction Dialer has improved both HFCU's productivity and its collections recovery efforts.

Cross-selling – Agents have been more successful in cross-selling additional products and services. One way is through use of an automatic recorded greeting option. Here, instead of an agent manually greeting each member and asking for the name and account number, callers hear the following: "Thank you for calling Heritage Federal Credit Union. My name is (agent name). Be sure to ask me about our 1% cash back offer! May I have your name and account number please?"

"The automated greeting is popular among agents because it not only delivers a promotion to every caller, it gives the agent a few seconds to refresh from the previous call and prepare for the next member," Damm adds.

HFCU recently completed an online banking conversion, which increased call volume significantly. Damm says, "CIC delivered the flexibility required to quickly and easily alter the IVR to support options that routed online banking calls away from other types of calls. This produced better service for all call types."

Hold messages were used to educate members about HFCU's new online banking system while they waited in queue.

"Members have told us that their question was answered by the message itself while they were holding for support, thus eliminating a lengthy hold and expediting service for other members," adds Damm.

Using CIC's reporting capabilities to improve the front-end IVR, HFCU analyzed reasons members were calling, restructured its IVR options accordingly, and reduced call volume by 5.6 percent by the close of 2013. This effort helped avoid anticipated call volume increases. Today, the IVR message delivery system is regularly altered to provide important member messages, deliver mentions of changes in servicing or announcements about special promotions.

For supervisory purposes, CIC's Interaction Supervisor® "provides a good snapshot of the current and previous day's performance in order to manage in real time and make staffing changes if necessary," Damm says.

"I am always aware of my team's status, calls in queue, and wait times. CIC's reports suit our needs and enable us to determine our service levels and abandon rates," says Damm.

Currently, HFCU is investigating additional applications to further improve member service. One is a CIC add-on application called Interaction Feedback®, where automated post-call member surveys would replace the transaction surveys processed currently.

Two others are Adapt's "Smart Info," a member-friendly, pre-queue balance delivery application, and Adapt's "Smart POP," where the member's account number prefills in the core system and lets the agent know if the member has been authenticated.

"Given HFCU's increased membership," Damm says, "the reason for any member to call is growing. Yet over the course of the first half of 2014 in particular," she says, "the credit union's overall call volume has remained stagnant."

Damm states, "CIC - and the additional automated applications provided by Adapt - have helped us hold down our need to deliver increasing numbers of calls to live agents. When you run a small call center, that fact can pay off on a number of fronts."

About Adapt:
Adapt Telephony Services specializes in providing financial institutions with a powerful, all-in-one IP communications software suite called Customer Interaction Center, powered by Interactive Intelligence. Interactive is a Gartner "Leaders" category magic quadrant company. CIC, installed as either a hosted solution or premise-based, provides a better experience for customers, employees and IT staff. Our largest single financial customer - sold, installed and maintained by Adapt - has more than $9 billion in assets. Adapt operates throughout North America. Here are a few unique CIC applications:

* Core System Integration for Screen Pops and IVR
* Multichannel Contact Center (voice, email, fax, chat, SMS, Social Media)
* Multichannel Recording for PCI Compliance and Coaching
* Outbound Campaigns for Collections, Opt-in, On-Boarding, and CAM alerts
* Disaster Recovery for all Applications, backed up and upgraded immediately
* Single Point of Administration

All components are driven from a single platform, with a single administrative interface. Adapt also can provide additional functionality by integrating to your existing phone system.

<div align="center">

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</div>

EXHIBIT I

Client/Server Architecture

Call Center Supervisor
Interaction Client
Interaction Scripter Client
IC Business Manager
Interaction Dialer Manager

Call Center Agent
Interaction Client
Interaction Scripter Client

Script Developer
Interaction Scripter Client
HTML editor
Interactions Scripter API
or Interaction Easy
Scripter
Dialer IceLib
Dialer NRRLib

**Outbound Dialer Servers (ODS) or
Manual Calling Servers (MCS)**
Customer Interaction Center
Dialer Server subsystem
Dialer Stat Repeater subsystem
Interaction Administrator

**Central Campaign Server (CCS) or
Campaign Server Switchover Pair**
Campaign Server subsystem
UpdateServer subsystem
Dialer/TranServer subsystem
Dialer/StateServer subsystem

DBMS Server
Microsoft SQL or
Oracle Database

Interaction Dialer is a client/server system—its software components run on different hardware devices. The figure above shows the subsystems that run on ODS/MCS and CCS servers, and desktop applications used by agents, administrators and developers. The Central Campaign Server is depicted in a Campaign Server Switchover Pair, but can be a single CCS. The DBMS is depicted on dedicated hardware, but in some cases the database can exist on same server as the CCS.

INTERACTIVE INTELLIGENCE®

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EXHIBIT J

Dialer Architecture and Database

Introduction to Interaction Dialer

Agent Management

Dialer Database Concepts

Dialer Tables

Introduction to Interaction Dialer

This section explains what Interaction Dialer is, and the benefits it brings to an organization. You will learn the difference between automatic and predictive dialing, and how connections are analyzed to determine whether a person answered. Modes of outbound calling are discussed, along with Dialer's client/server architecture and integration with CIC. In addition, you will learn about Dialer's Manual Calling feature.

What is Interaction Dialer?

Interaction Dialer is a set of client/server extensions that add predictive dialing or manual calling along with campaign management features to the Customer Interaction Center (CIC) platform. When Interaction Dialer is installed on a CIC server, that server is called either an Outbound Dialer Server (ODS) for automatic, predictive dialing or a Manual Calling Server (MCS) for manual calling. For more information, see the Automatic Dialing vs. Manual Calling topic.

- Interaction Dialer conducts **campaigns.** During a campaign, calls are placed to contacts based upon information read from a contact list. *Campaign* is a generic term that describes the process of contacting a list of people according to a prescribed list of rules.

- Campaigns can place outbound telephone calls, play .wav files to answering machines, send faxes to fax machines, and route calls answered by a live person to an Interaction Attendant profile or Dialer agent.

- Interaction Dialer provides full control over campaign definition and execution. It provides everything a contact center needs to conduct campaigns without the expense of predictive dialer hardware.

Since Interaction Dialer is a CIC application, it uses CIC's architecture, feature set, and event processing engine. Dialing is performed by CIC subsystems. CIC provides PBX, IVR, ACD, and other services for inbound, outbound, and blended interactions. Campaigns can scale to hundreds or thousands of agents at one site or thousands at multiple sites. Remote agents are supported. Campaigns can run simultaneously at multiple sites while being administered centrally.

EXHIBIT K

-Search-

Dialing Modes

Interaction Dialer has several **dialing modes** that determine how contacts are dialed. A different Dialing mode can be selected for each campaign, and the dialing mode for a campaign can be changed on the fly in many cases.

> **Note**: If you are running Interaction Dialer using the Manual Calling feature license, then the only dialing mode that will be available to you is the Preview Dialing Mode. However, the Preview Countdown feature is not supported on a Manual Calling Server.

The dialing modes are:

◄ Most Aggressive			Least Aggressive ►	
Predictive	**Power**	**Precise**	**Agentless**	**Preview**
Predicts when agent will be available	Waits for agent to become available	Used within Predictive and Power Dialing	Play messages, send faxes, use outbound IVR	Agent is presented with contact's info for review
Dials multiple numbers before agent becomes available	Dials multiple numbers when agent becomes available	Sets agent aside for call to assure the call is not abandoned	Can transfer from IVR to inbound Queue	Agent presses dial when ready
Uses call analysis to detect live person	Uses call analysis to detect live person	Uses call analysis to detect live person	Uses call analysis to detect live person	Agent performs call analysis

Predictive Dialing Mode

- Predicts agent availability and number of calls needed to keep agent busy

- Places calls in parallel before agent becomes available

- System uses call analysis to determine dial result

In predictive dialing mode, the server predicts agent availability and places calls based on internal statistics. The server predicts the number of calls that must be made in order to provide each agent with a targeted party at the moment the agent becomes available.

Predictive mode is similar to Power mode, except that Dialer tries to predict when an agent will be idle and places calls before that, so that by the time the call has been answered by a customer, a Dialer agent will be just becoming available.

Predictive mode tracks how long agents spend on calls, so it can make an accurate prediction. This mode requires at least 7 agents to be logged on, preferably more than that. The larger the agent pool, the more accurate the predictions can be, minimizing idle time even further than in Power mode and decreasing the likelihood of an abandon.

Power Dialing Mode

- Predicts number of calls needed to keep agent busy

- Places calls in parallel once agent become available

- Uses call analysis to determine dial result

Preview mode dials from the campaign list only when an agent is available to process the call. This mode waits for an agent to become available before placing outbound calls. It calculates the number of calls to place in order to reach a live party.

When an agent becomes available, Dialer sends a number of calls to Telephony Services to be placed from the system queue. The number of calls to place is determined by a calculation that Dialer makes based on previous calls, with the goal of one of the initiated calls being answered by a live person. This number can be limited by the Dialer configuration. For example, if Dialer calculates that the current campaign has a 20 percent connect rate, it will try to place 5 calls for every idle agent to ensure a connection. Once a live caller is returned by Telephony Services, Dialer hands the call off to an ACD queue or an ACD group, to be routed to an agent who is logged into the campaign. Note that the call is not necessarily assigned to the agent whose idle event caused the call to be placed. This mode requires at least 5 agents to be logged into a campaign for best effect and to minimize idle time and abandons.

Precise Dialing Mode

- Used within predictive or power campaign via contact policy

- Sets agent aside while placing call to assure call is not abandoned

Used within Predictive or Power campaigns, Precise mode is entered per call via a contact policy. This mode sets an agent aside for that call to guarantee that the call cannot be abandoned. Once the call is finished, places agent back in pool of all idle agents.

Agentless Dialing Mode

- Does not require call center agents

- System uses call analysis to determine dial result

Agentless campaigns do not connect parties with an agent. Instead, Agentless campaigns can play a .wav file to answering machines; send faxes to fax machines, and route calls answered by live recipients to an Attendant profile.

Interaction Attendant is an easy-to-use graphical interface used for inbound IVR and auto-attendant menus and for outbound IVR and messaging applications. Using an Interaction Attendant profile allows in-house development of simple messaging applications or more complex outbound IVR menus, giving called parties the option to talk to an agent, remove their name from a list, and so on.

Agentless campaigns respond appropriately to live persons, to answering machines, and to fax machines by playing an audio file, transferring the call to an Attendant profile, sending a fax, or by hanging up.

Note: Interaction Dialer Manager does not allow a campaign's calling mode to be changed from agentless to another mode, while the campaign is active.

Preview Dialing Mode

- Presents contact to agent before dialing

- Agent dials call and performs call analysis

Preview dialing mode presents agents with information about the targeted party before the call is actually placed. When ready, the agent manually starts the call by clicking a button in the predictive client application. The agent can be given the option to reschedule the call, or skip to the next data pop.

In Preview Mode, Dialer presents a Scripter pop to an available agent and places a call object in an Initializing state on the agent's queue. The agent will then review the information for the customer record and decide whether to place the call or skip to the next record. Once the call is placed, it is placed from the agent's user queue and no call analysis is done (the agent will hear all pre-connect audio). This is the slowest of the Dialing methods, but it prevents any chance of an abandon. This mode is typically used for high value contacts.

EXHIBIT L

1   IN THE UNITED STATES DISTRICT COURT

2   FOR THE SOUTHERN DISTRICT OF MISSISSIPPI

3   SOUTHERN DIVISION

4

5

6   STEVEN W. HOLLAND,
              PLAINTIFF,
7
      VERSUS   CAUSE NO. 1:15CV306 HSO-JCG
8
      KEESLER FEDERAL CREDIT UNION,
9   DEFENDANTS.

10

11

12

13   _____

      DEPOSITION OF KEESLER FEDERAL CREDIT UNION
14   DESIGNEE: DELMA POWELL

15   _____

16

17   Taken at the Offices of Schwartz, Orgler &

18   Jordan, PLLC, 2355-B Pass Road, Biloxi,

19   Mississippi, on Tuesday, August 30, 2016

20   beginning at 10:28 a.m.

21

22

23

24

25

1   A.   Verbal reports, yes.

2   Q.   As far as -- let's take a look at the

3 interrogatories. Go back to Exhibit Number 6. Let

4 me know when you have that.

5   A.   Yes, I have in it front of me.

6   Q.   Flip to page number eight, and we're

7 looking at Exhibit -- interrogatory number six.

8 This interrogatory, it's a contingent

9 interrogatory, and it asks Keesler if it contends

10 that the calls placed to my client's cellular

11 telephone number were manually dialed. Please

12 state all facts which support this contention,

13 including describing in detail the process utilized

14 by defendants representatives who manually dialed

15 the phone calls and identifying all specific

16 equipment utilized to manually dial those calls.

17   There's an objection. Then after that

18 it states that, to manually dial numbers,

19 employees of the defendant use their fingers and

20 touch keys on the phone they are using. Do you

21 follow where I am there?

22   A.   I'm there.

23   Q.   Currently in the collection department,

24 have you observed employees actually using their

25 finger to dial desk-set phones to make the

1   collection calls to borrowers of Keesler, debt

2   collection calls?

3   A.   Do they use their fingers to make the

4   calls?

5   Q.   Yes.

6   A.   No, they're using a mouse to interact

7   with a key pad on the computer screen, meaning just

8   as you would on the key pad of the phone, push the

9   one and the two, they're using the mouse to click

10 that on the face of the software.

11   Q.   I'm familiar with what you're talking

12 about, that's why I wanted to get some clarity on

13 that.   So that's a pathway with the Interaction

14 Client software?

15   A.   That's correct.

16   Q.   So those calls would be made from the

17 workstation of the collection representative that's

18 initiating the call through the mouse function on

19 their computer?

20   A.   That describes it, yes.

21   Q.   Now, let me back up. It's on the same

22 page here, but it's the continuation of the answer

23 to interrogatory number five. It states that,

24 Interaction Client software allows for the

25 recording of incoming and outgoing calls, and

1   Q.   Is it Keesler's policy to leave a

2 voicemail every time a collection representative

3 reaches the voicemail box of the called number?

4   A.   No, sir, it is not our policy. It's our

5 practice based on our procedures to do that.

6   Q.   All right, tomato, tomato. The

7 voicemail -- once the representative leaves a

8 voicemail, at that point they are -- your practice

9 is to make a note in the system, in the Akcelerant

10 system; is that accurate?

11   A.   That is correct.

12   Q.   Let's assume that the representative

13 doesn't follow Keesler's practice of making a note

14 in the Akcelerant system. At that point, assuming

15 the representative did not make a note in the

16 Akcelerant system, would there be any record of

17 that call having been made?

18   A.   Not in the Akcelerant system.

19   Q.   How about anywhere else?

20   A.   Not to my knowledge.

21   Q.   To your knowledge, does Keesler -- you

22 understand what a prerecorded message is?

23   A.   Prerecorded, I do.

24   Q.   Sort of self-defining, prerecorded. To

25 your knowledge -- I'll just ask you straight out.

1   Does Keesler utilize prerecorded messages in

2   connection with its debt collection calls?

3   A.   Does Keesler use prerecorded messages in

4   connection with its collection calls?   There is a

5   prerecorded message that's delivered at the

6   beginning of every collection call to ensure that

7   we identify ourselves as Keesler and that we are

8   calling for the purpose of collecting a debt.

9   Q.   And sometimes I've heard those sort of

10 being affiliated with what you call RPC, or right

11 party contact? I'm not saying Keesler uses any

12 type of prerecorded message for that purpose. I'm

13 saying some entities that I've encountered will use

14 some type of a prerecorded message to identify, if

15 you are not the person, insert whoever's name here,

16 press one, and if you are not, press two. Does

17 Keesler utilize that type of protocol?

18   A.   I am familiar with that practice and

19 Keesler does not use that protocol.

20   Q.   So the prerecorded message that's

21 delivered is simply to -- tell me, I don't want to

22 speculate, tell me what is stated during that

23 prerecorded message.

24   A.   Is that the call is -- once we've

25 identified that it's the right party contact, then

1   there's a descriptive message that's delivered to

2   ensure we identify ourselves as being, one, with

3   Keesler and, two, for the purpose of collecting a

4   debt.

5   Q.   And that's -- heard that for the purpose

6   of collecting a debt is referred to as a couple

7   different things, the mini Miranda, are you

8   familiar with that?

9   A.   I am.

10   Q.   We'll just call it that then. I've heard

11 other people call it the Foti message, I don't know

12 if you've heard that before. You've been in the

13 collection industry for a long time.

14   A.   I have.

15   Q.   So part of that prerecorded message

16 includes that mini Miranda? Does it actually

17 include, this message is an attempt to collect a

18 debt, any information obtained will be used for

19 that purpose?

20   A.   Not to that extent.

21   Q.   It's some type of a truncated variation

22 of that?

23   A.   That's correct.

24   Q.   And then at that point, once that message

25 is played at that point, the call is -- tell me

1   what happens at that point.

2   A.   At that point, there's voice interaction

3   between the member and the collector, and there's

4   dialogue.

5   Q.   And then the person would, as far as

6   using the Akcelerant system to make notes, what is

7   Keesler's practice, is it to contemporaneously make

8   notes during the phone call or is it to make the

9   notes following the cessation of the call?

10   A.   No, our expectation is that the collector

11   will make the notes in the system during the

12   conversation.

13   Q.   So contemporaneously. Are Keesler's

14   representatives trained to do that?

15   A.   Yes.

16   Q.   Is that part of the annual training that

17   we talked about before?

18   A.   No, that's part of the -- first of all,

19   when the collector is hired, that's set as an

20   expectation, that they have the capability of doing

21   that, and then it's monitored during the time that

22   they're working. So there's no specific training

23   offered.

24   Q.   Randomly monitored to make sure the

25   people are doing what they're expected to do?

EXHIBIT M

Attendant Concepts

Interaction Attendant configures the auto attendant system built into Customer Interaction Center. An *auto attendant* automatically answers a call. It prompts the caller to make menu choices, and routes the call according to that caller's choice. Callers select options by pressing keys on their telephone's keypad. Based on these interactions, the auto attendant can:

- Play prerecorded prompts

- Transfer calls to an agent, operator, queue, or voice mail

- Look up information in a database

- Dynamically convert text to speech

- Offer a sub menu

- Send or receive a fax

- Provide access to voice mail

- Search an employee directory, and more.

Interaction Attendant provides complete control over what happens when each key is pressed. For example, you might play a prerecorded message, route the call to a queue, send a fax, look up information in a database, or pass control to a submenu. Interaction Attendant's predefined operations can be linked together any way you wish to create sophisticated menu applications.

Attendant empowers non-programmers to manage the interactions that callers encounter when they phone your business. Menus, operator access, direct dialing, and dial-by-name services are configured by filling out forms in Attendant. Customers manage call flows without having to customize handlers.

With IC, your communications system adapts to the way you do business, not the other way around. If you need custom business logic that Attendant does not offer, you can extend its functionality by developing custom handlers. Handlers are created outside of Interaction Attendant using *Interaction Designer*^{TM}—CIC's visual programming tool. Handlers extend the CIC platform to meet unique business requirements. They can perform just about any conceivable data processing task. But most customers find that Attendant provides all of the tools that they need to create robust IVR interactions.

Advantages of Interaction Attendant

- Interaction Attendant was written for *non-programmers*, with a non-system administrator in mind. It is easy to use, yet powerful. You can create sophisticated IVR menus with it.

- Interaction Attendant is *visual*. It displays hierarchical relationships between configuration objects, and flags errors before configurations are published. This makes the system easy and safe to use.

- Interaction Attendant doesn't require special hardware. Voice prompts are recorded within Attendant using a station phone.

- Interaction Attendant is *flexible*. Configurations can be published to a server, exported to a file, or imported from a file. A single instance of Attendant can edit the auto-attendant configuration of many IC servers. Attendant keeps track of who is editing each configuration and locks files to prevent conflicts.

- Interaction Attendant is *robust*. It provides the ability to control calls after they have been routed to a workgroup queue. It offers advanced scheduling mechanisms, database functionality (insert, query, update) and sophisticated profile-based routing. You can gather information from a caller, and write it to a database, or use caller-entered data in another menu interaction. For example, you might ask a user to enter a PIN number and then use it to look up an account balance that is read back to the caller.

- Interaction Attendant is *extensible*. It can invoke custom handlers for unlimited functionality. However, the primary benefit of Attendant is that it allows users to design simple call flows without writing handlers.

- Interaction Attendant is *precise*. Calls are compared to user-defined profiles that determine the scheduled processing that will occur. For example, inbound calls can be filtered using DNIS, ANI, and/or trunk line information associated with the call. Afterwards, schedules select the most appropriate call processing based upon the time of day. For example, persons who phone your company after business hours can be presented with different options from those that are presented during daytime hours. IVR interactions can be customized to any extent required by the customer.